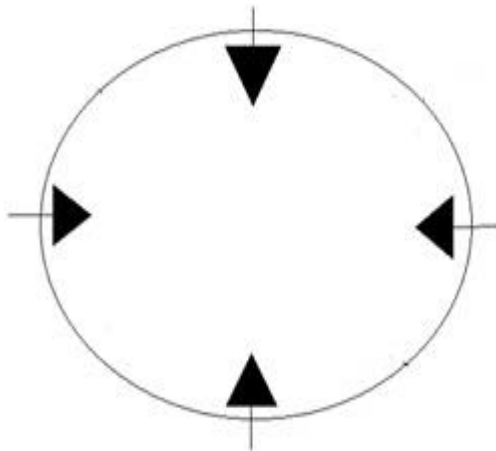**Circular Arrangement**

# #7 Golden Rules Of Circular Arrangements In Reasoning#

(i) Draw a circle – mark the places (4/6/7/8) – and then start reading the question!
Example:- (Four people facing towards centre)

(ii) Arrange the information in every sentence – if possible – if not – write it down beside you circle in shorthand – to be arranged when further information clarifies the position.

Example:- B is sitting 2nd to the right of A.(Direct Info)
C is Neighbor of B.(Indirect Info)
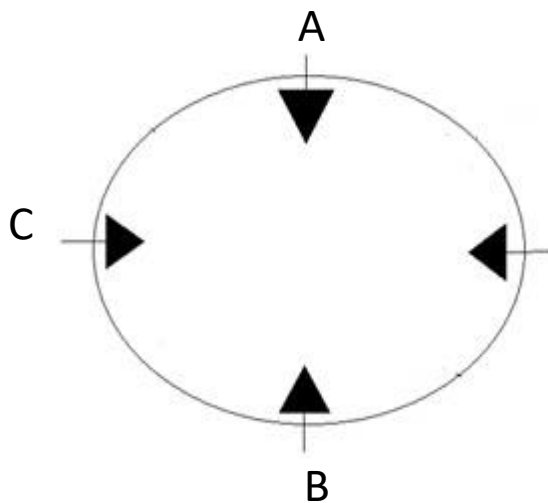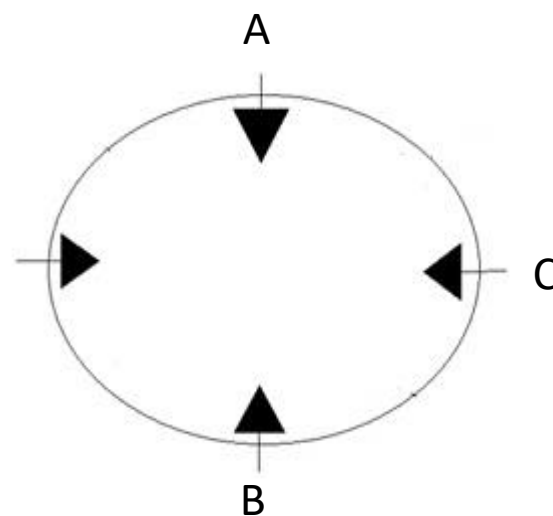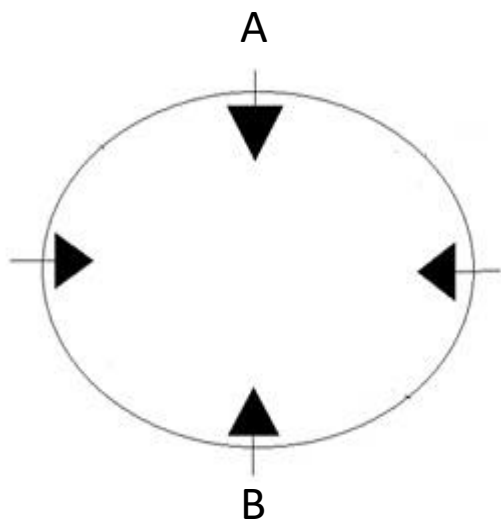
(iii) If P has two possible ways to be seated – namely Seat 1 and Seat 2. You are not understanding from the available information, where to seat P. So you, arbitrarily seat him in either Seat 1 or Seat 2.

Let's say you seated him at Seat 2 – ok – now go ahead and try seating the others as per the rest of the information in the question.

If you are able to seat them all without any contradictions or problems, you have successfully solved the question and P's seat that you chose is correct.

And if you find a contradiction of P's Seat 2 – then you immediately know for sure that Seat 2 is not the right place of P and it has to be Seat 1, as there were only 2 possibilities!

(iv) Always arrange those person's around your circle, whose positions are 100% clear and accurate.

(v) If there are 4/6/8/10 persons, i.e., even number of people then they have to sit in opposite direction in pair. It means one will always sit the opposite to other person.

(vi) Where some are facing outward and some facing inward, then mark the places with arrows pointing inward/outward.
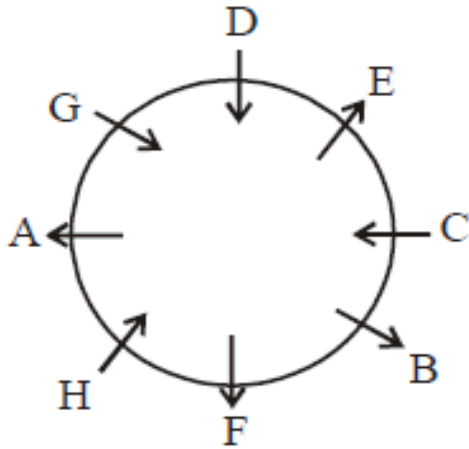
(vii) Practice! The Golden Rule to solving Seating Arrangements – advocated everywhere by everyone is – LOTS OF PRACTICE!
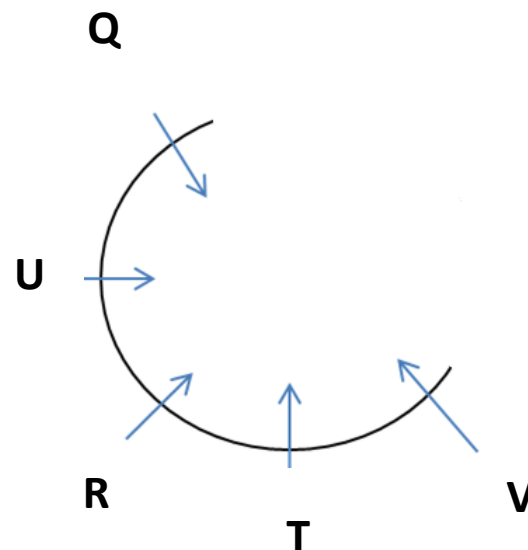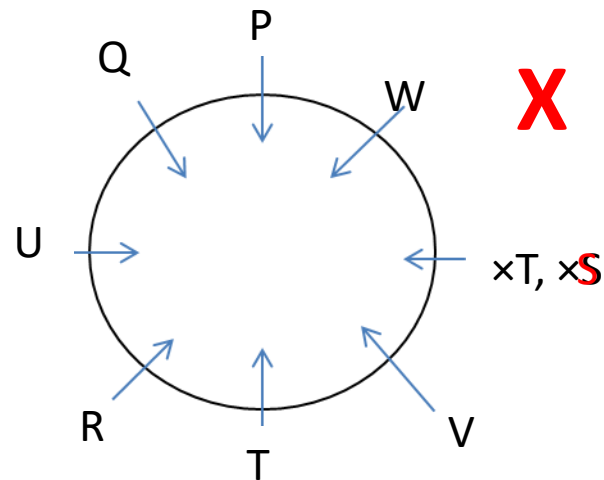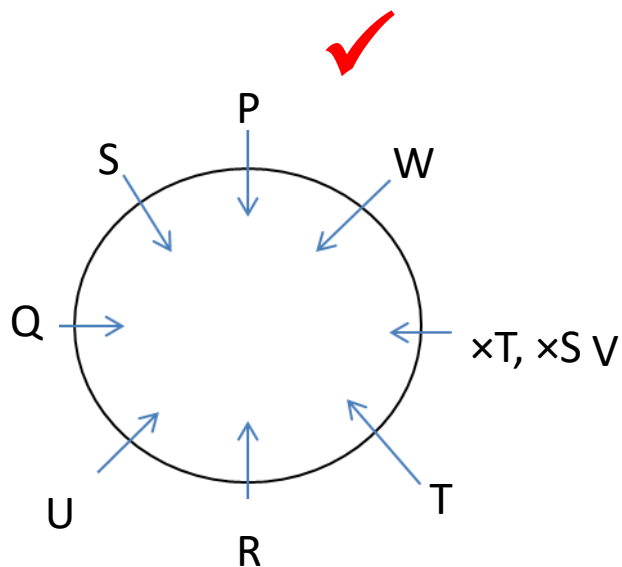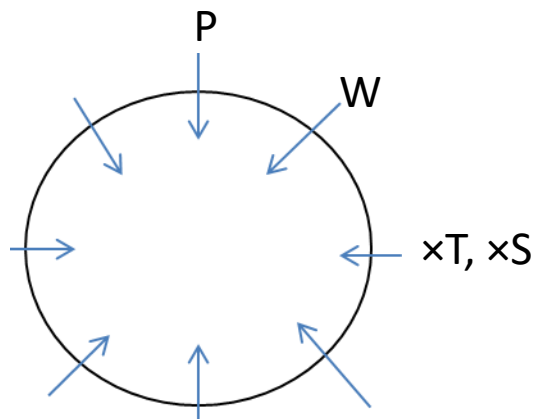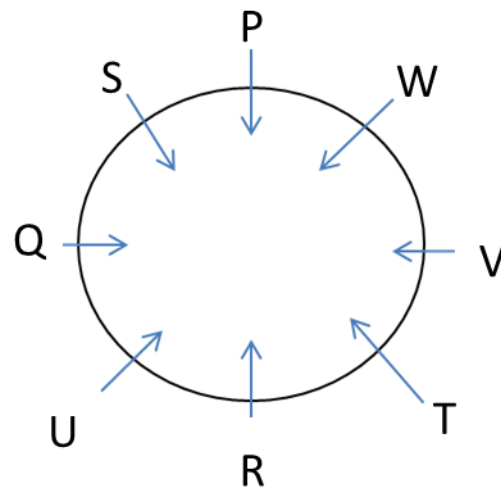Honestly, there is no other way around it!

Example:-1

P, Q, R, S, T, U, V & W are eight friends sitting around a circle facing towards the centre.
i) W is to the immediate left of P but is not the neighbour of T and S.
ii) U is to the immediate right of Q and V is neighbour of T.
iii) R is between T and U

Q1. What is the position of V?
a. To the immediate right of W
b. Between T and R
c. Third to the right of U
d. Second to the left of S
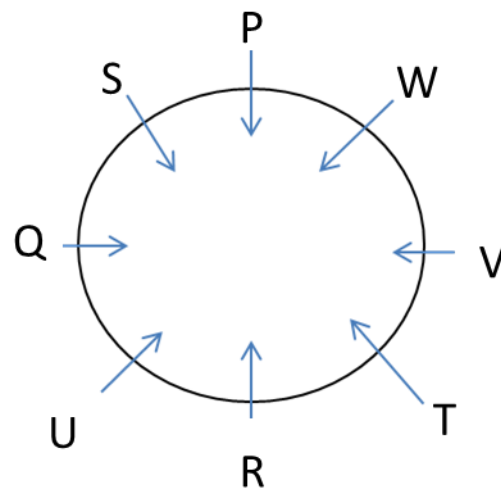e. None of these

Answer:- c

Q2. What is the position of S?
a.   Between Q and U
b. To the immediate left of P
c. Second to the right of U
d. To the immediate left of Q
e. None of these

Answer:- d

Q3. Which of the following statements is true?
a. U is the neighbor of V
b. V is between W and T
c. W is between P and S
d. T is between U and Q
e. None of these

Answer:- b

Q4. Who is sitting opposite to Q?
a. W
b. T
c. U
d. V
e. None of these

Answer:- d

Q5. Four of the following five are alike in a certain way on the basis of their positions and so form a group. Which is the one that does not belong to the group?
a. PT
b. WQ
c. QT
d. UV
e. WP

Answer:- e

Example:-2.

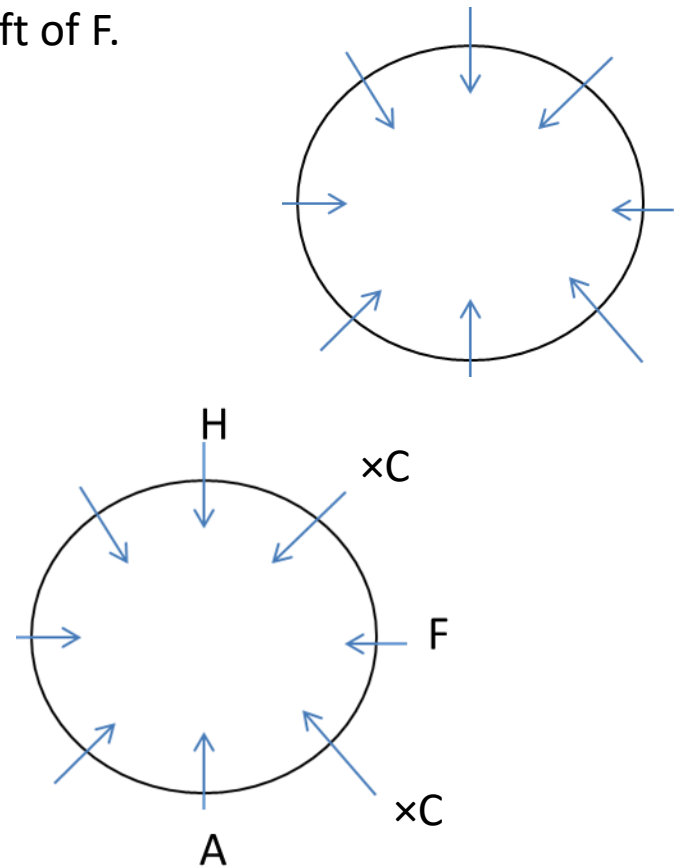Study the following information carefully and answer the questions
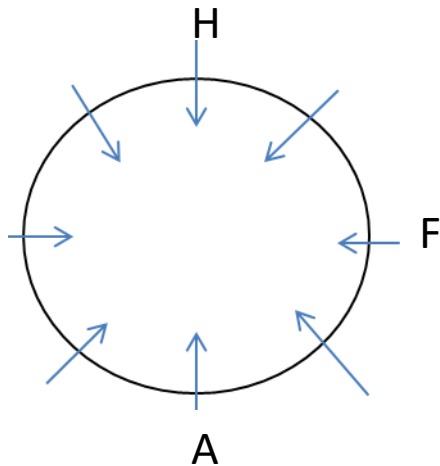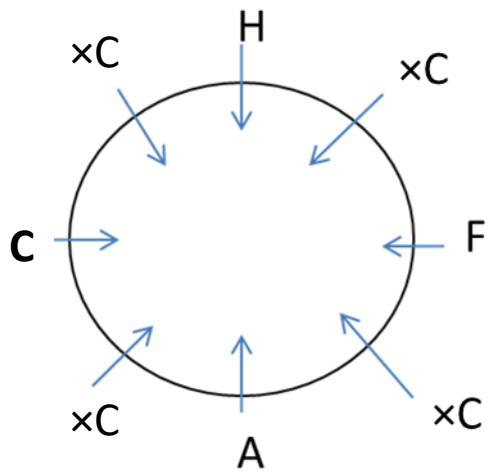A, B, C, D, E, F, G and H are sitting around a circle, facing the centre.
i) A sits fourth to the right of H while second to the left of F.
ii) C is not the neighbor of F and B.
iii) D sits third to the right of C.
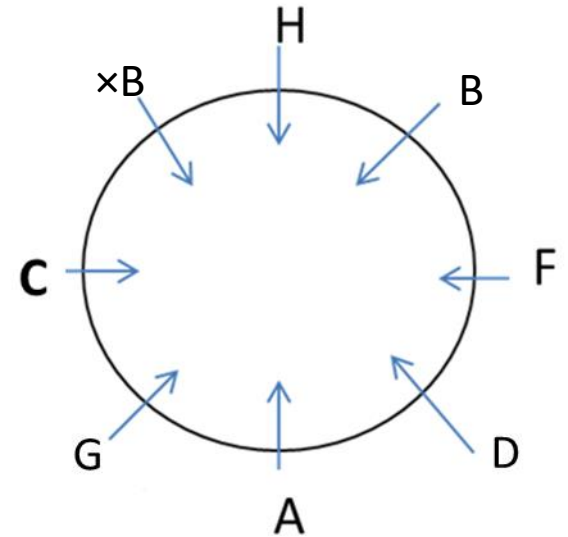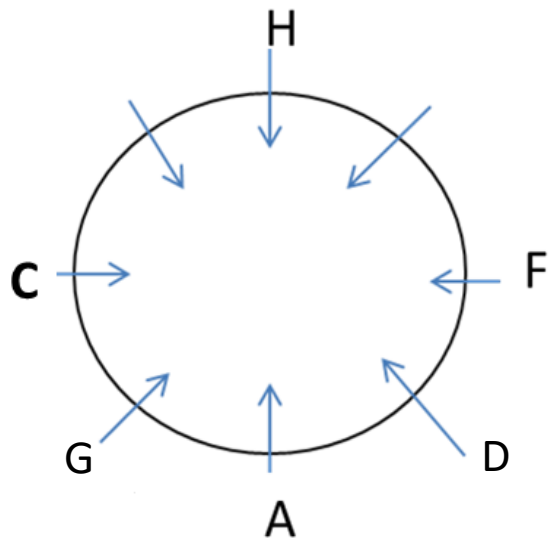iv) H never sits next to G.

Example:-2.

Study the following information carefully and answer the questions

A, B, C, D, E, F, G and H are sitting around a circle, facing the centre.

i) A sits fourth to the right of H while second to the left of F.

ii) C is not the neighbor of F and B.

iii) D sits third to the right

iv) H never sits next to G.

Example:-2.

Study the following information carefully and answer the questions
A, B, C, D, E, F, G and H are sitting around a circle, facing the centre.
i) A sits fourth to the right of H while second to the left of F.
ii) C is not the neighbor of F and B.
iii) D sits third to the right of C.
iv) H never sits next to G.
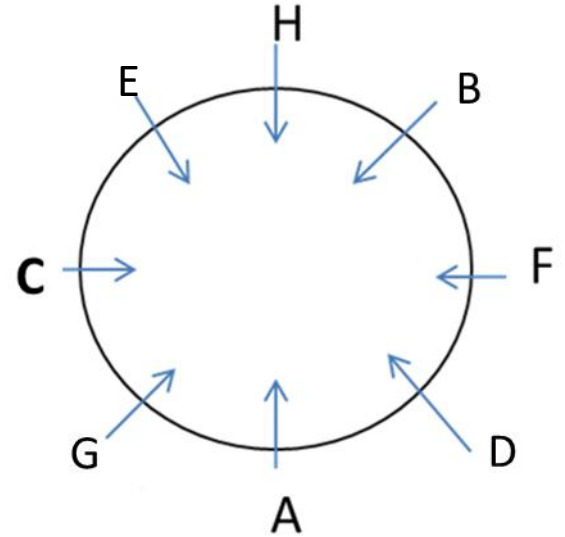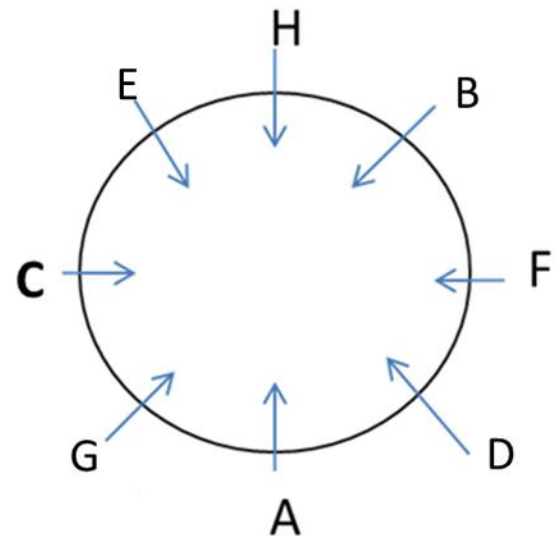
Q6. Who among the following sits between B and D?
a. G
b. F
c. H
d. A
e. C

Answer:- b

Q7. Which of the following pairs sit between H and G?
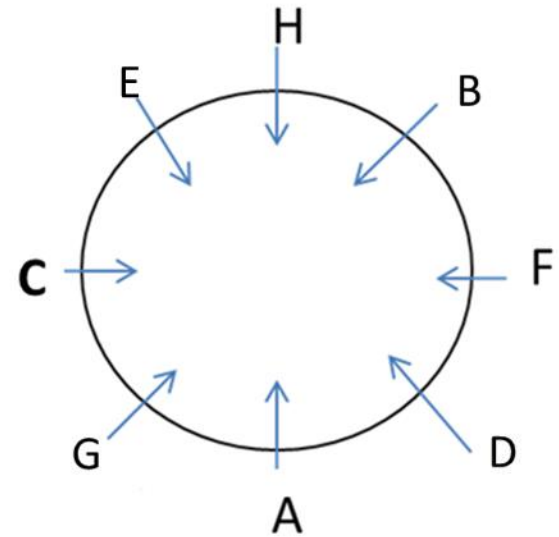a. BH
b. EF
c. CE
d. DB
e. None of these

Answer:- c

Q8. Four of the following five are alike in a certain way based on their positions in the seating arrangement and so form the group. Which is the one that does not belong to that group?

a. AE
b. HF
c. BD
d. GE
e. CH

Answer:- a

Q9. Who is to immediate right of A?
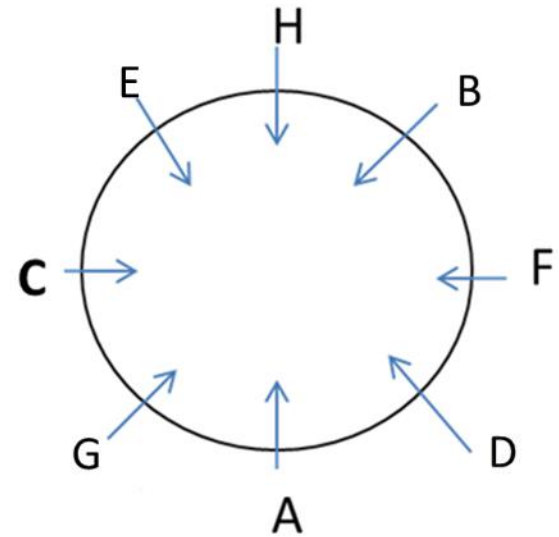
a. C
b. D
c. G
d. Data inadequate
e. None of these

Answer:- b

Q10. Who sits second to the right of B?

a. A

b. C

c. D

d. E

e. None of these

Answer:- d

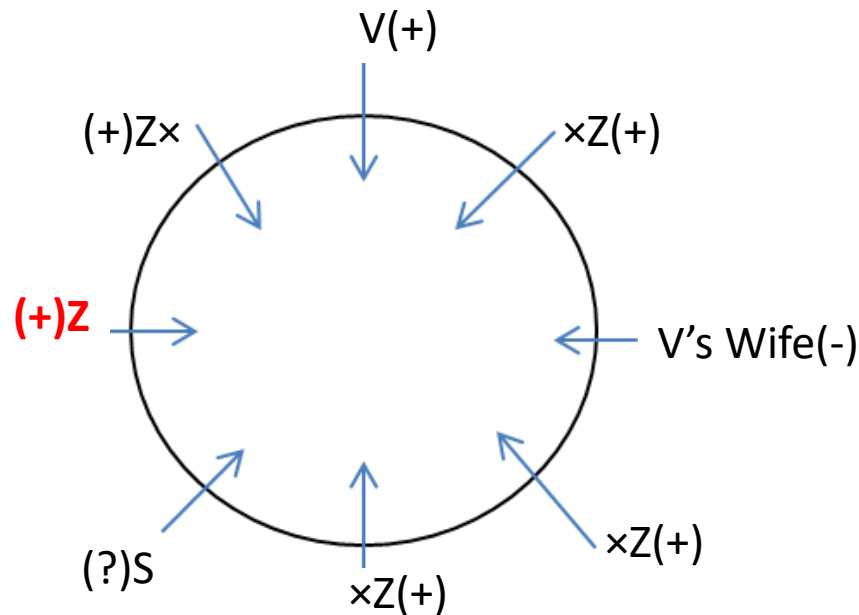
Q11. Which is the position of B with respect to C?
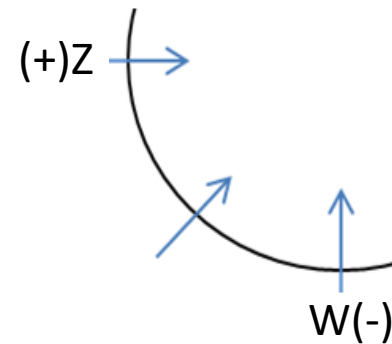
I. Second to the right

II. Sixth to the left

III. Third to the left

IV. Fifth to the right

a. Only II

b. Only II and III

c. Only I and IV

d. Data inadequate

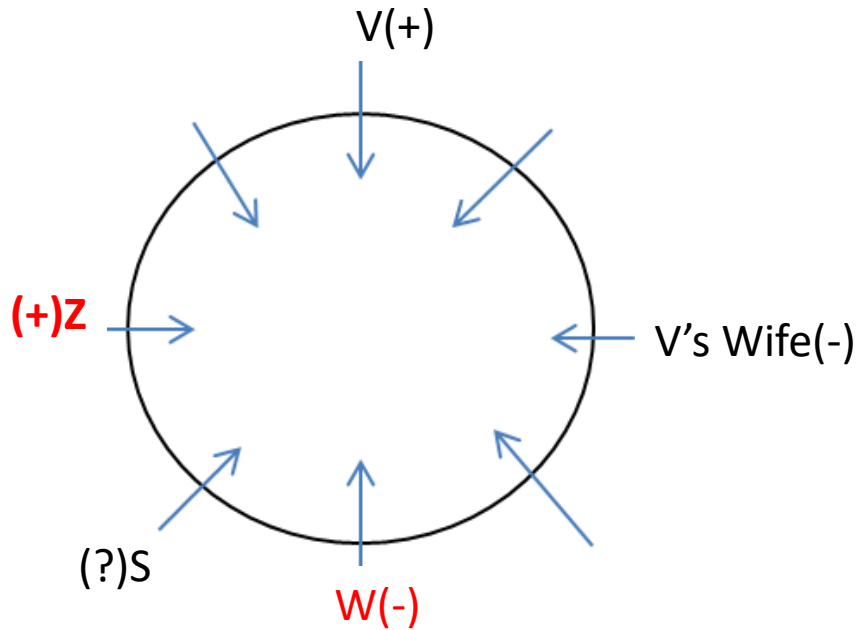e. Both III and IV

Answer:- e

Example:- Eight friends Qadir, Rakesh, Satish, Tarun, Vishwas, Wazir, Yusuf and Zakir are sitting around a circular table facing the centre. 3 friends are males and the rest are females. No two males are immediate neighbors of each other. Vishwas sits second to the right of his wife. Satish sits third to the right of Vishwas. Wazir sits second to the right of her husband Zakir. Zakir is not an immediate neighbour of Vishwas's wife. Tarun is a male and Yusuf is not an immediate neighbour of Vishwas. Rakesh sits second to the right of Qadir.
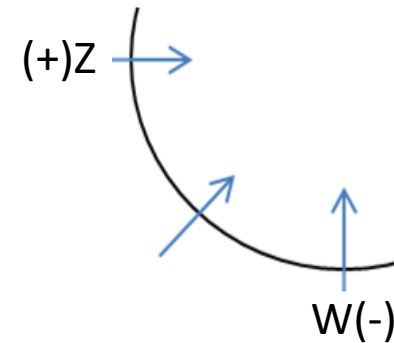

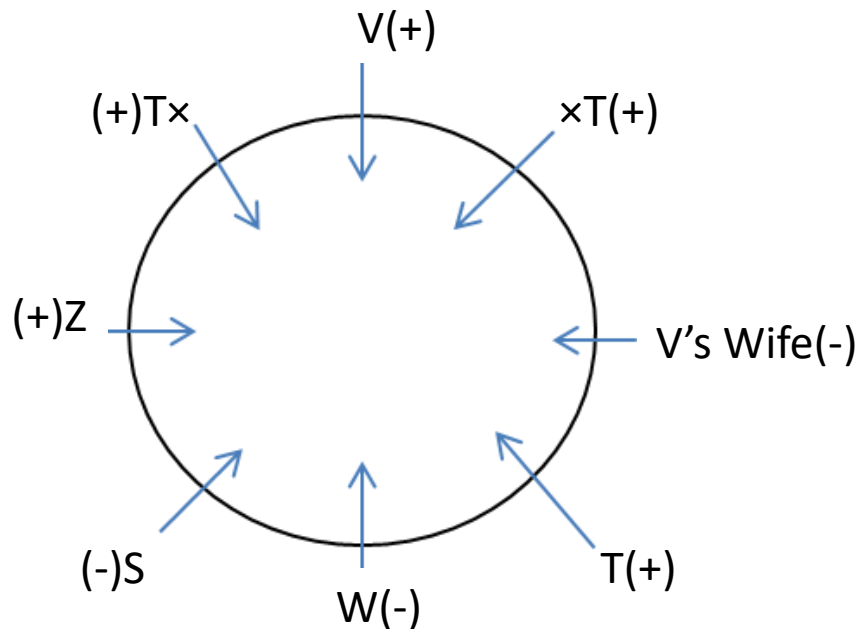Three Friends ⟶ Male(+)
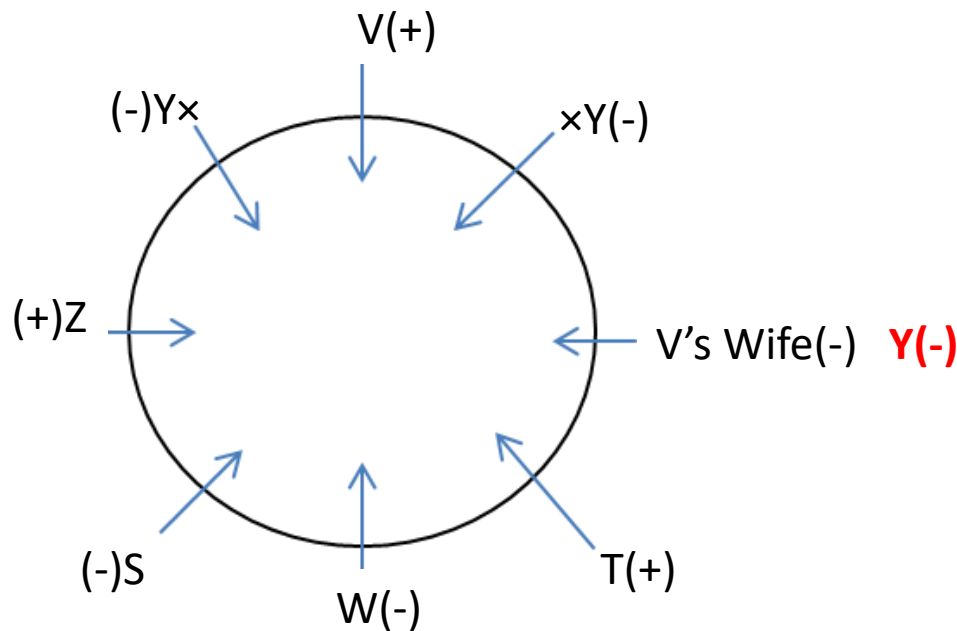Five Friends ⟶ Female(-)
Male ⟵×⟶ Male

Example:- Eight friends Qadir, Rakesh, Satish, Tarun, Vishwas, Wazir, Yusuf and Zakir are sitting around a circular table facing the centre. 3 friends are males and the rest are females. No two males are immediate neighbors of each other. Vishwas sits second to the right of his wife. Satish sits third to the right of Vishwas. Wazir sits second to the right of her husband Zakir. Zakir is not an immediate neighbour of Vishwas's wife. Tarun is a male and Yusuf is not an immediate neighbour of Vishwas. Rakesh sits second to the right of Qadir.
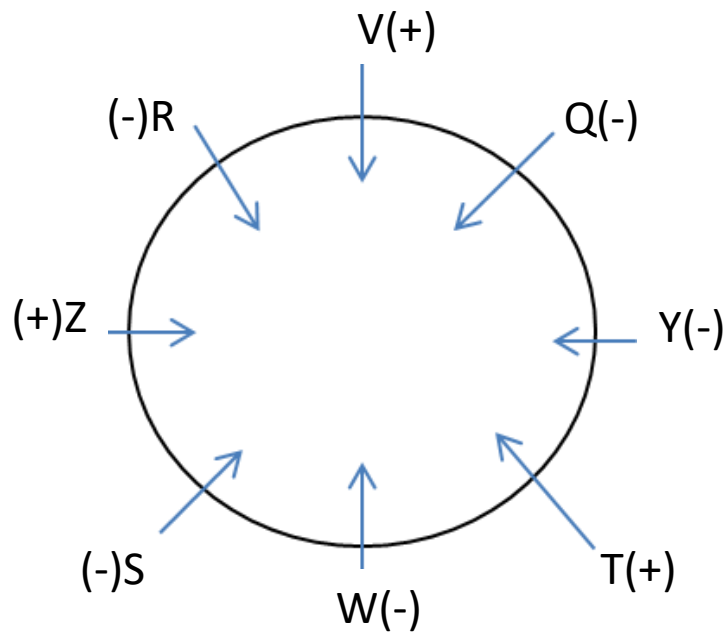
V(+)

(+)Z

V's Wife(-)

(?)S

W(-)

Three Friends ⟶ Male(+)
Five Friends ⟶ Female(-)
Male ⟷✕⟶ Male

(+)Z

W(-)

Example:- Eight friends Qadir, Rakesh, Satish, Tarun, Vishwas, Wazir, Yusuf and Zakir are sitting around a circular table facing the centre. 3 friends are males and the rest are females. No two males are immediate neighbors of each other. Vishwas sits second to the right of his wife. Satish sits third to the right of Vishwas. Wazir sits second to the right of her husband Zakir. Zakir is not an immediate neighbour of Vishwas's wife. Tarun is a male and Yusuf is not an immediate neighbour of Vishwas. Rakesh sits second to the right of Qadir.


Three Friends ⟶ Male(+)

Five Friends ⟶ Female(-)

Male ⟵×⟶ Male

Example:- Eight friends Qadir, Rakesh, Satish, Tarun, Vishwas, Wazir, Yusuf and Zakir are sitting around a circular table facing the centre. 3 friends are males and the rest are females. No two males are immediate neighbors of each other. Vishwas sits second to the right of his wife. Satish sits third to the right of Vishwas. Wazir sits second to the right of her husband Zakir. Zakir is not an immediate neighbour of Vishwas's wife. Tarun is a male and Yusuf is not an immediate neighbour of Vishwas. Rakesh sits second to the right of Qadir.

V(+)

(-)Y×   ×Y(-)

(+)Z   ← V's Wife(-) **Y(-)**

(-)S   T(+)

W(-)

Three Friends ⟶ Male(+)

Five Friends ⟶ Female(-)

Male ⟵×⟶ Male

Example:- Eight friends Qadir, Rakesh, Satish, Tarun, Vishwas, Wazir, Yusuf and Zakir are sitting around a circular table facing the centre. 3 friends are males and the rest are females. No two males are immediate neighbors of each other. Vishwas sits second to the right of his wife. Satish sits third to the right of Vishwas. Wazir sits second to the right of her husband Zakir. Zakir is not an immediate neighbour of Vishwas's wife. Tarun is a male and Yusuf is not an immediate neighbour of Vishwas. Rakesh sits second to the right of Qadir.

Three Friends ⟶ Male(+)
Five Friends ⟶ Female(-)
Male ⟷✕⟶ Male

Q1. What is the position of Tarun with respect to Zakir?
(a) First to the left
(b) Immediately to the right
(c) Second to the left
(d) Third to the right

Answer:-d
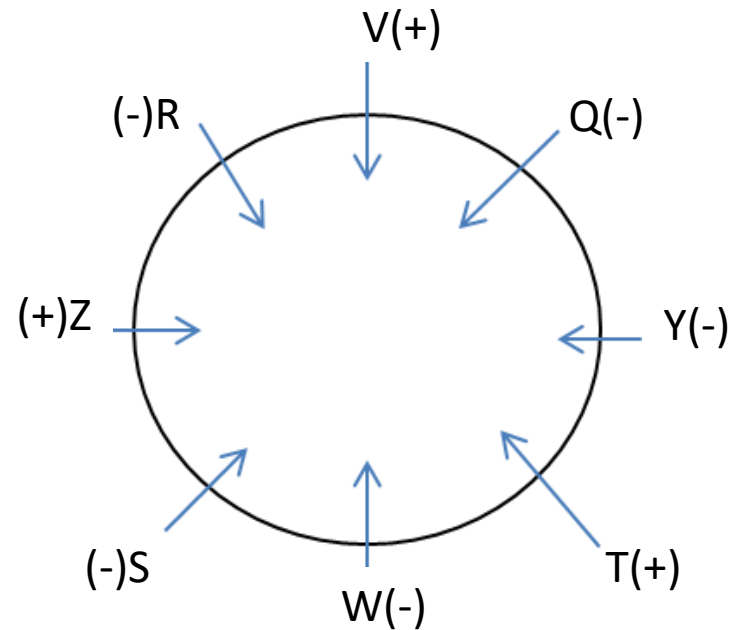
Q2. Which of the following statements regarding Satish is definitely correct?
(a) Satish is one of the male members of the group
(b) Both the immediate neighbours of Satish are females
(c) Satish sits fourth to the left of Tarun
(d) Wazir is an immediate neighbour of Satish

Answer:-d

Q3. Vishawas's wife is:
(a) Qadir
(b) Yusuf
(c) Rakesh
(d) Tarun

Answer:-b
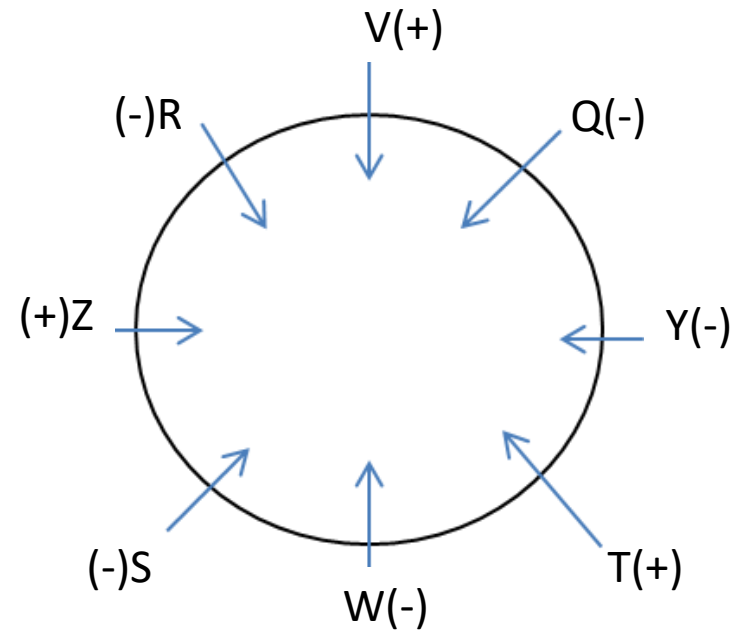
Q4. Rakesh is seated immediately between:
(a) Two Males
(b) Two females
(c) One male and one female
(d) Cannot be determined

Answer:- a

Q5. Who sits next to Zakir?
(a) Rakesh and Vishwas
(b) Rakesh and Wazir
(c) Rakesh and Satish
(d) Satish and Vishwas

Answer:-c
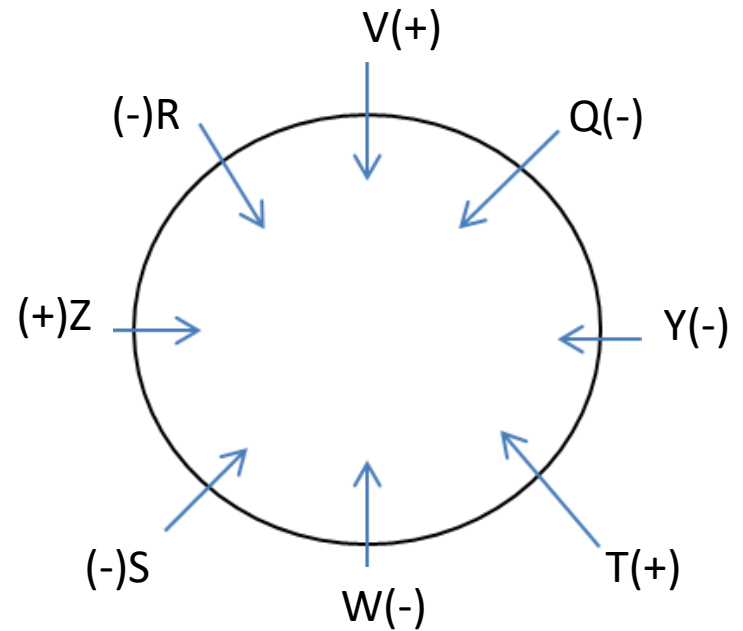
Q6. How many people sit between Rakesh and Tarun?
(a) None
(b) One
(c) Two
(d) Three

Answer:-d

Example:-Study the information given below and answer the given questions.

Eight friends A, B, C, D, E, F, G and H are sitting in a circle, but not necessarily in the same order. Four of them are facing outside and four of them are facing the centre.

(1). E faces outside, Both the immediate neighbours of E face the centre. H sits second to the right of E. B sits third to the left of E.

(2). D faces the centre. Both the immediate neighbours of D face outside.

(3). G sits second to the left of A. B sits third to the right of H

(4). F is an immediate neighbour of D. C is an immediate neighbour of G.

(5). D is not an immediate neighbour of B.

(1). E faces outside, Both the immediate neighbours of E face the centre. H sits second to the right of E. B sits third to the left of E.

Four —— facing outside

Four —— facing to the centre
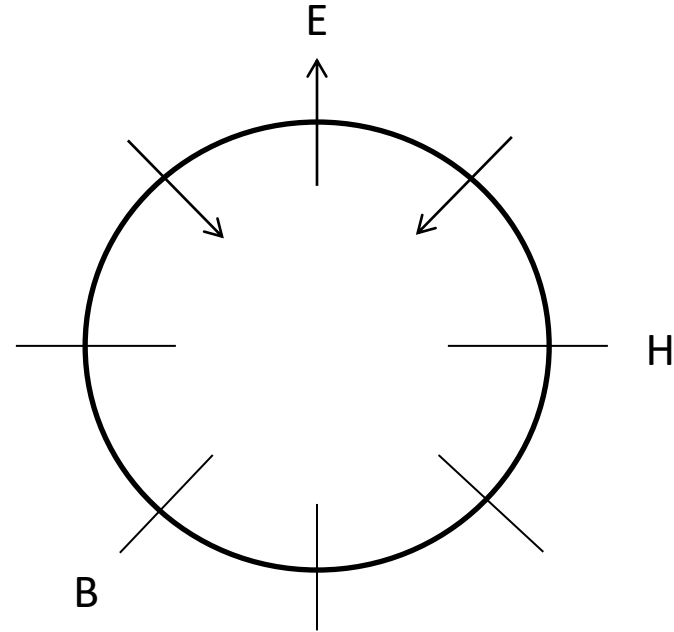
(2). D faces the centre. Both the immediate neighbours of D face outside.

Four —— facing outside

Four —— facing to the centre
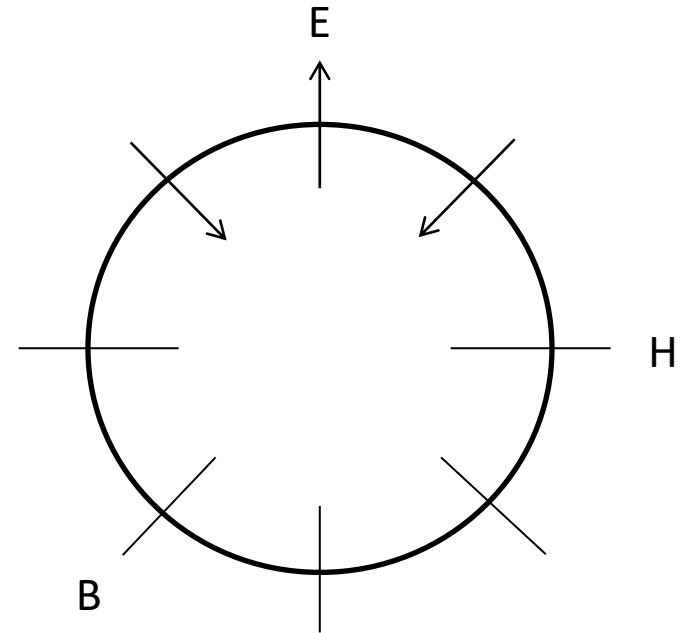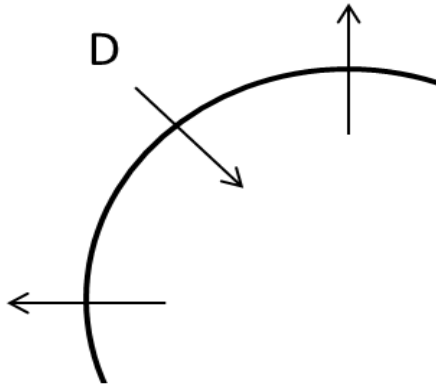
(3). G sits second to the left of A. B sits third to the right of H

Four —— facing outside

Four —— facing to the centre

#G sits second to the left of A

(4). F is an immediate neighbour of D. C is an immediate neighbour of G.

Four —— facing outside

Four —— facing to the centre

#G sits second to the left of A

#C is an immediate neighbour of G

OR
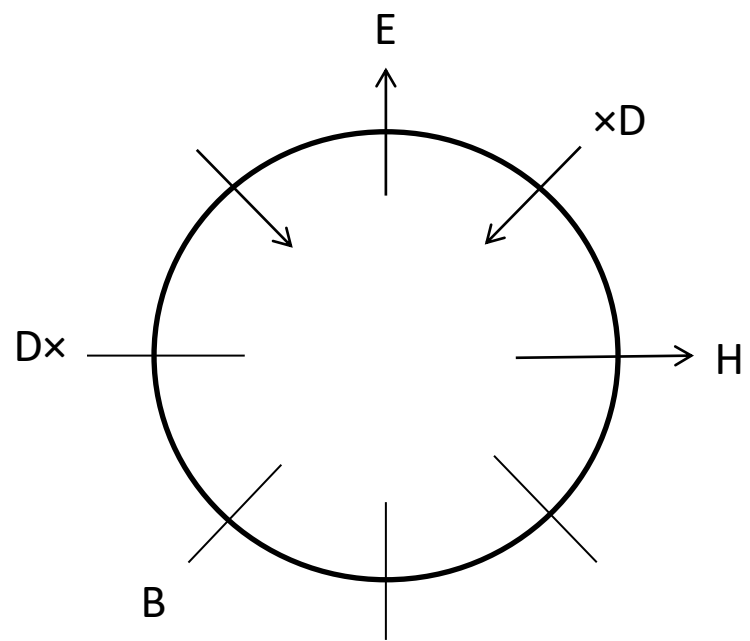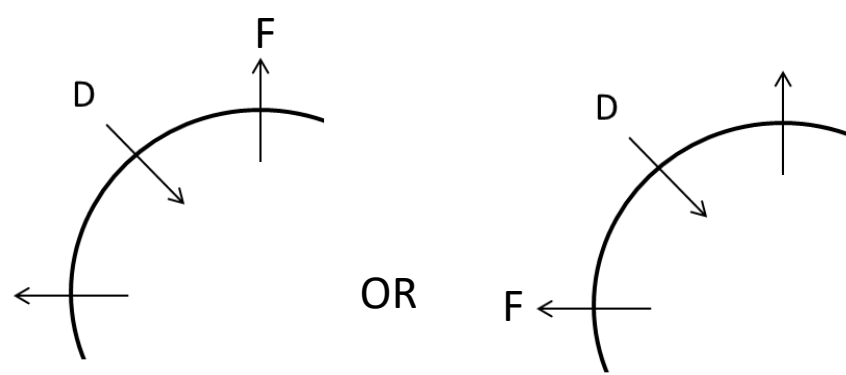
(5). D is not an immediate neighbour of B.

Four — facing outside
Four — facing to the centre

#G sits second to the left of A

#C is an immediate neighbour of G

Four —— facing outside
Four —— facing to the centre

F

D

E
×D

D×   → H

B

F

D

#G sits second to the left of A

#C is an immediate neighbour of G

D

F

E
×D

F   → H

B

D

Four — facing outside
Four — facing to the centre

#G sits second to the left of A

#C is an immediate neighbour of G

OR
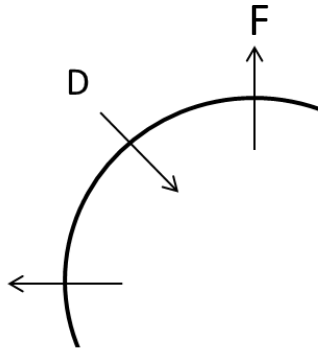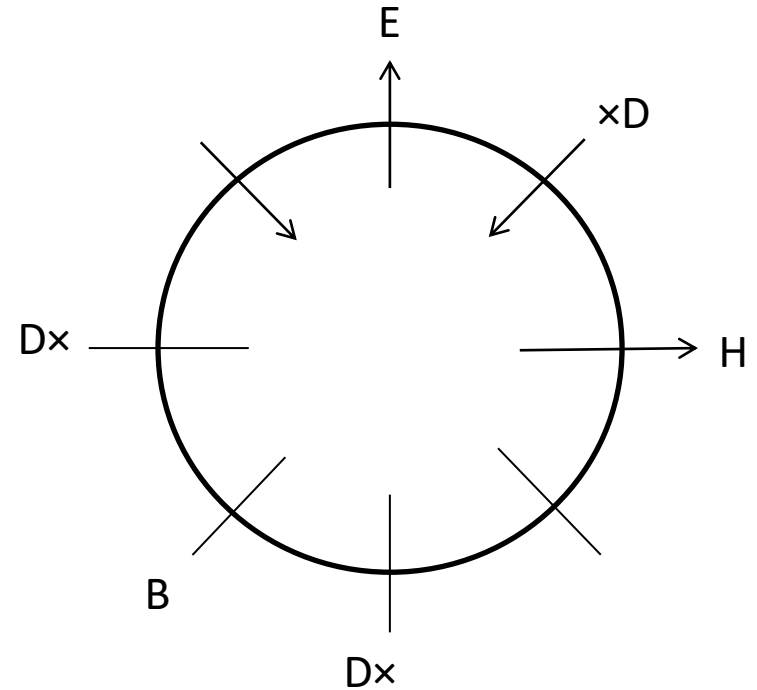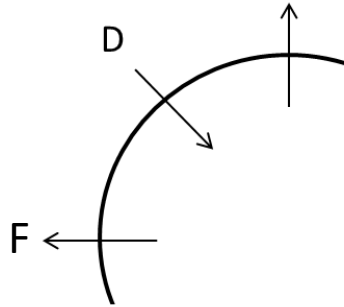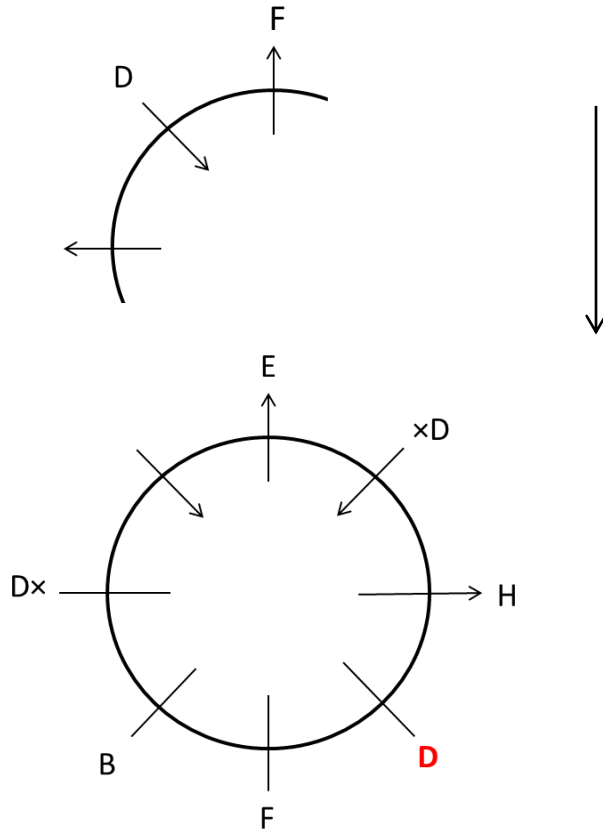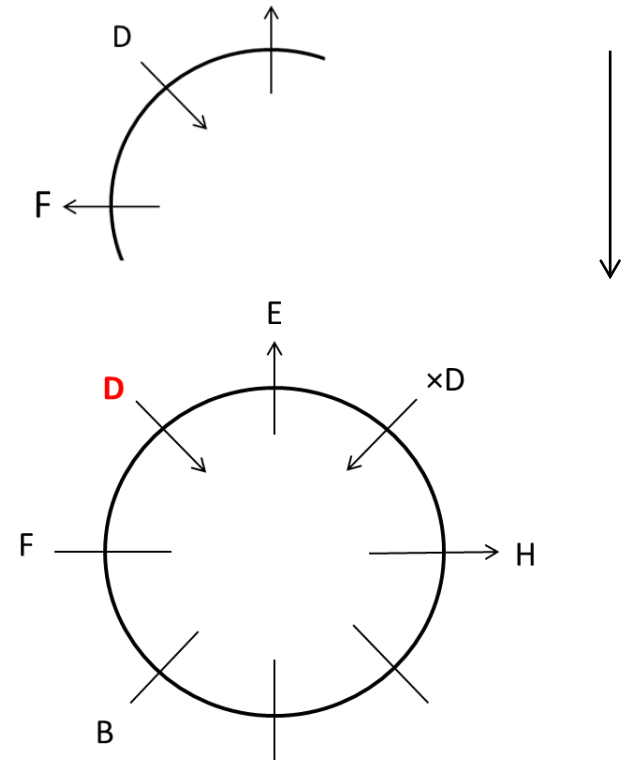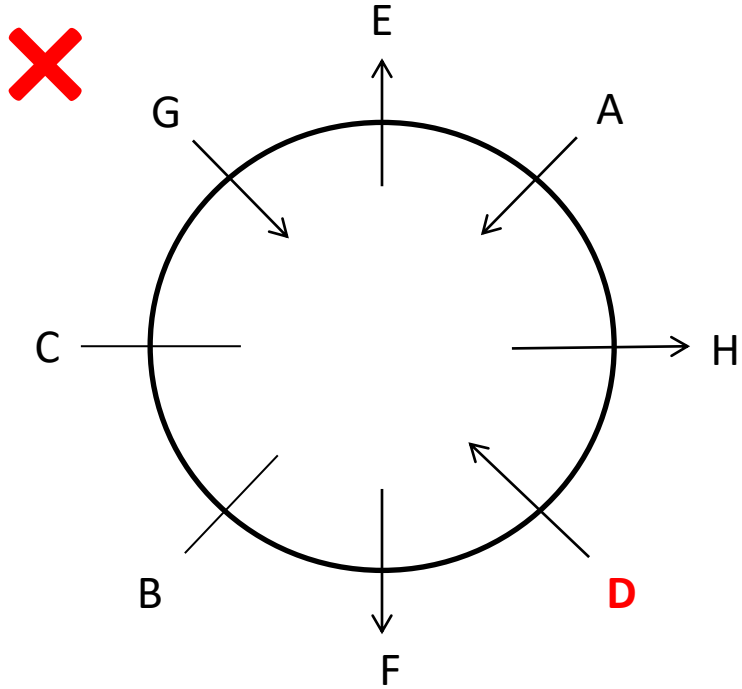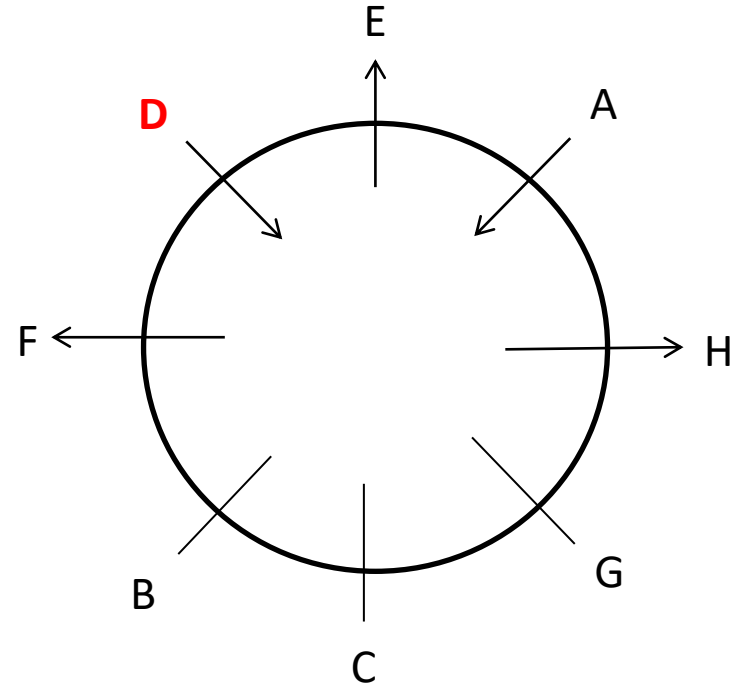
#Unarranged Information#

Four —— facing outside

Four —— facing to the centre

#We are not able to decide the facing direction of B, C and G.#
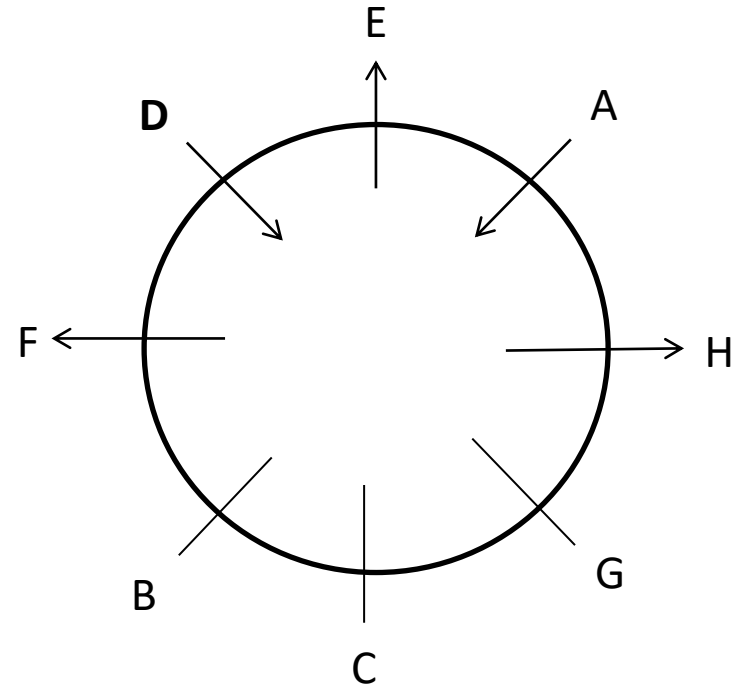
Q1. Who amongst the following sits on the immediate right of H?
1) A
2) D
3) C
4) G
5) None of these

Answer:-4
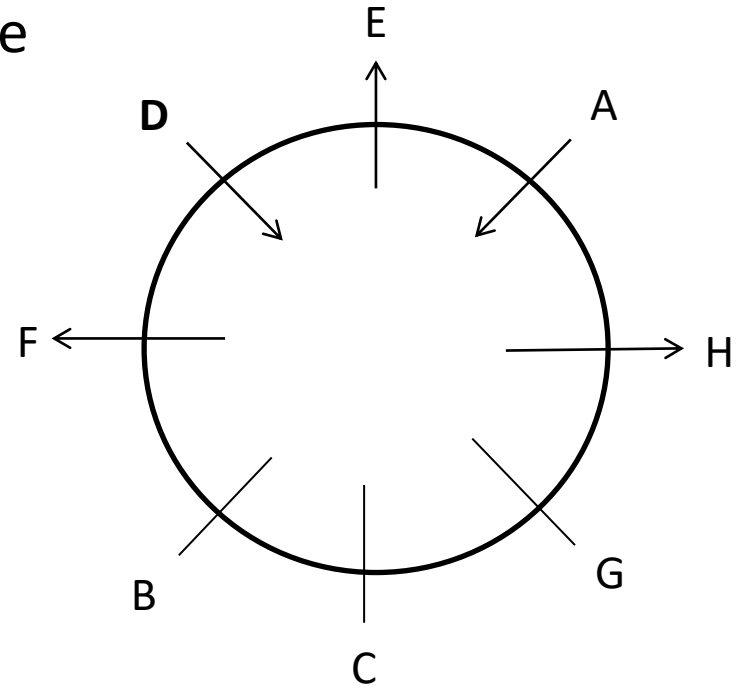
Q2. Who amongst the following sits third to the right of A?
1) D   2) E   3) F   4) A
5) None of these

Answer:-3

Q3. Four of the following five are alike in a certain way, based on the information given above and so form a group. Which is the one that does not belong to that group?
1) HA   2) FH   3) GC
4) DA   5) AE

Answer:-3
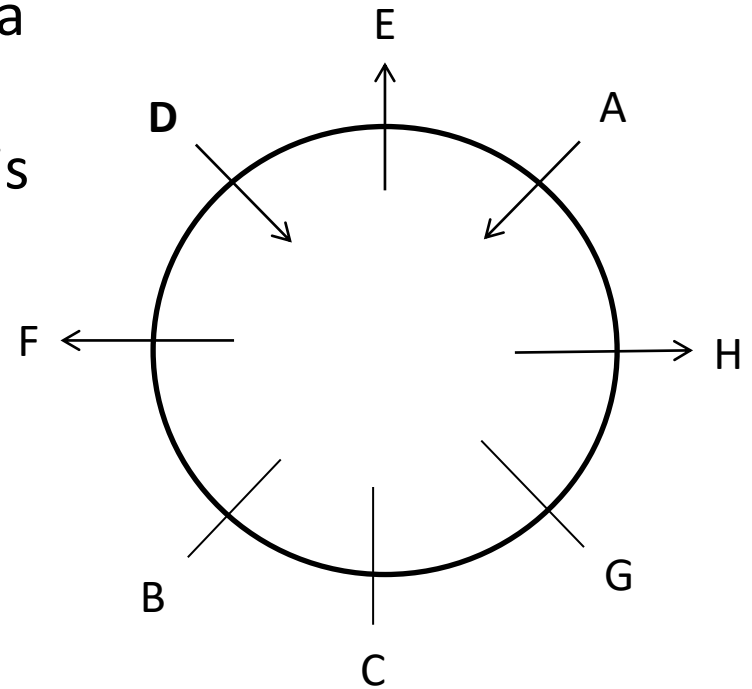
Q4. If all the people are made to sit in an alphabetical order, in clockwise direction, starting from A, the position of whom amongst the following remains the same (excluding A)?
1) E   2) F   3) C   4) G   5) None of these

Answer:-2

Q5. How many people are seated between A and C (counting clockwise from A)?
1) Two
2) Four
3) None
4) One
5) Three

Answer:-1
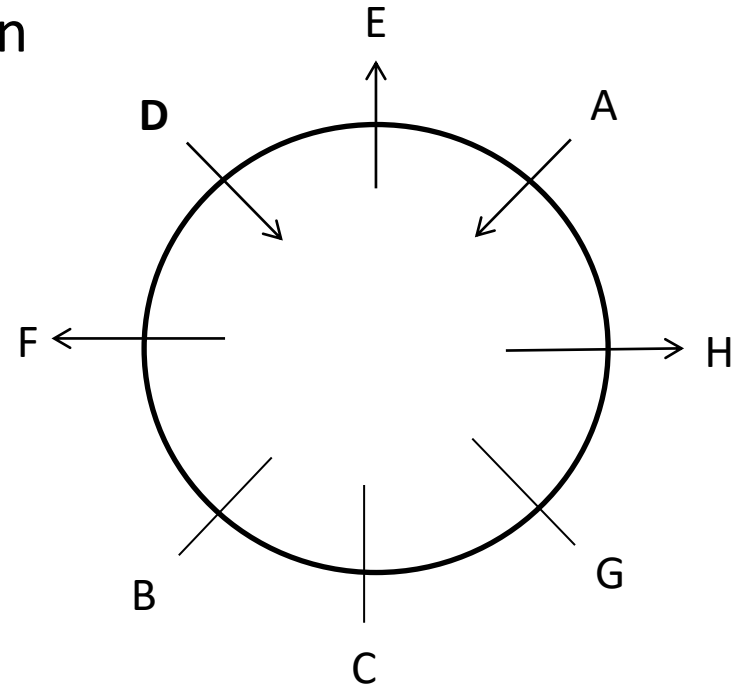
Q6. Who amongst the following sits next to the left of C?
1) E   2) B   3) G   4) A   5) None of these

Answer:-5

Example:- There is a group of six persons, A, B, C, D, E and F seated around a circular table. There are two females and four males in this group. Both the females are married to two males of the same group. The remaining two males are bachelors.

I) A, a female, is sitting opposite to one of the bachelors, F. Her husband is not on either of her sides.

II) Another female is sitting opposite to her husband D.

III) The two females are not sitting adjacently.

IV) On the immediate right of both the females is seated a bachelor.

V) C has the same marital status as F while B is a father of two sons.

Four Friends are Male(+)
Two Married and Two Bachelors

Two Friends are Female(-)

I) A, a female, is sitting opposite to one of the bachelors, F. Her husband is not on either of her sides.
II) Another female is sitting opposite to her husband D.
III) The two females are not sitting adjacently.
IV) On the immediate right of both the females is seated a bachelor.
V) C has the same marital status as F while B is a father of two sons.

A(-)Wife

?(-)D's Wife **X**
?(+)A's Husband **X**

?(-)D's Wife **X**
?(+)A's Husband **X**
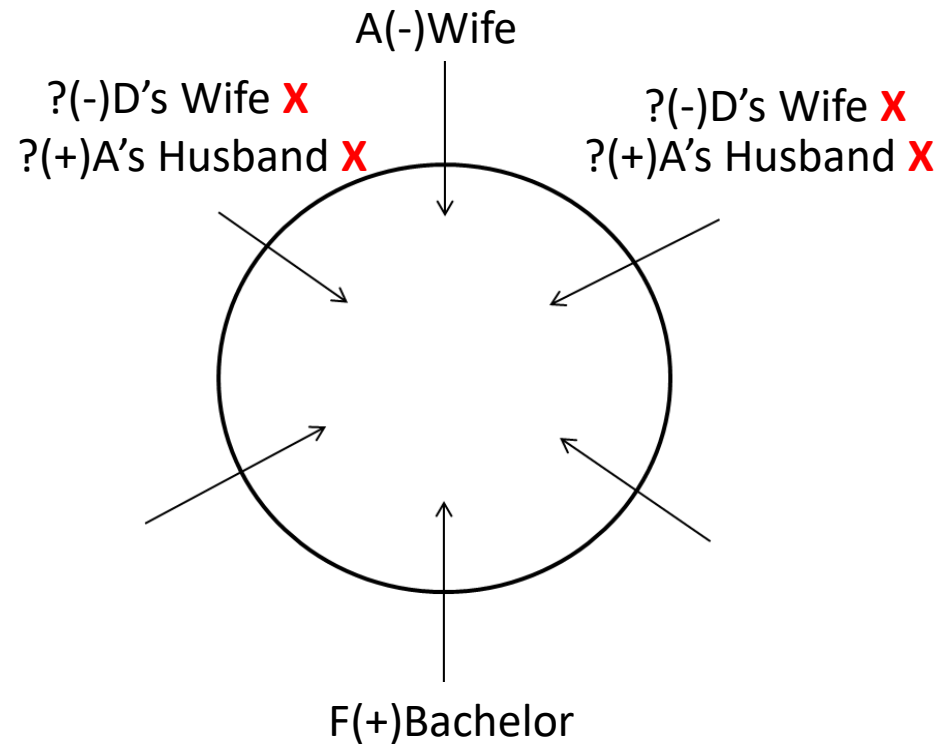
F(+)Bachelor

Four Friends are Male(+)
Two Married and Two Bachelors

Two Friends are Female(-)

?(-)D's Wife ⟶ D(+) (Husband)

IV) On the immediate right of both the females is seated a bachelor.

V) C has the same marital status as F while B is a father of two sons.

A(-) Wife

D(+) Husband
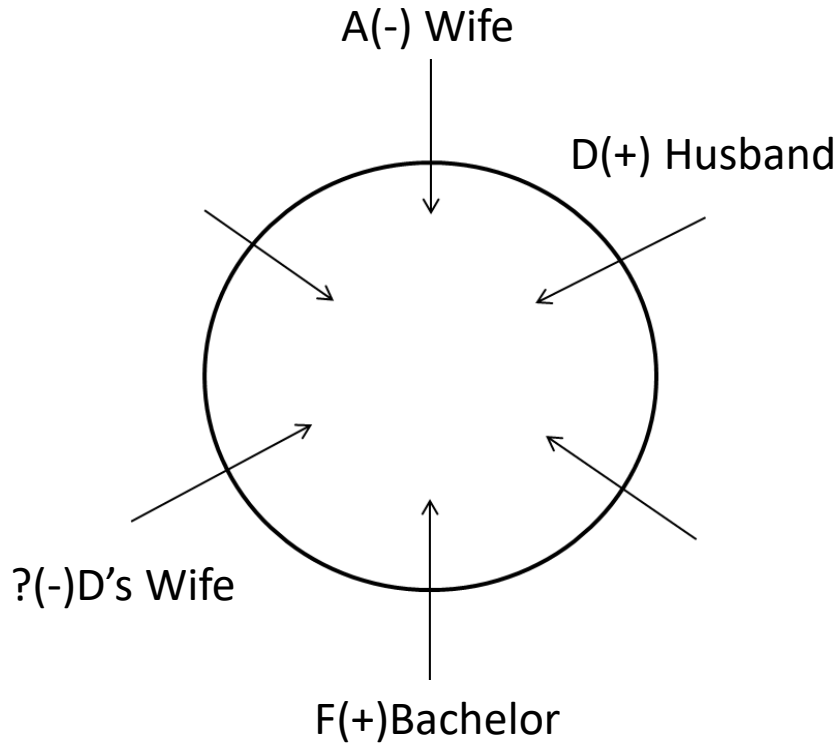
?(-)D's Wife

F(+)Bachelor

Four Friends are Male(+)
Two Married and Two Bachelors

Two Friends are Female(-)

?(-)D's Wife ⟶ D(+) (Husband)

V) C has the same marital status as F while B is a father of two sons.

A(-) Wife

?(+) Bachelor   D(+) Husband

?(-)D's Wife

?(+) A's Husband

F(+) Bachelor

A(-) Wife

C(+) Bachelor   D(+) Husband

E(-) (D's Wife)   B(+) (A's Husband)
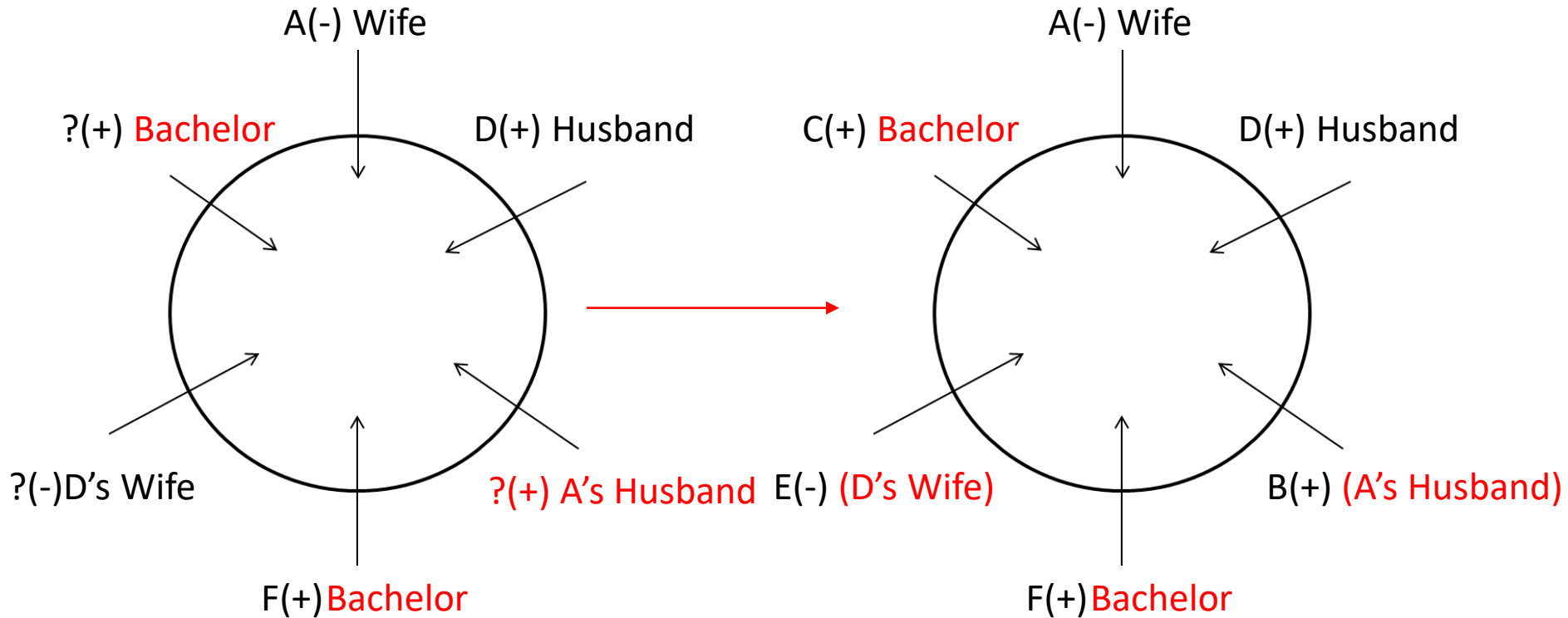
F(+) Bachelor

Q1. Who is the other female in the group?
a) E
b) C
c) D
d) CND
e) NOT

Answer: a

A(-) Wife

C(+) Bachelor

D(+) Husband

E(-) (D's Wife)

B(+) (A's Husband)
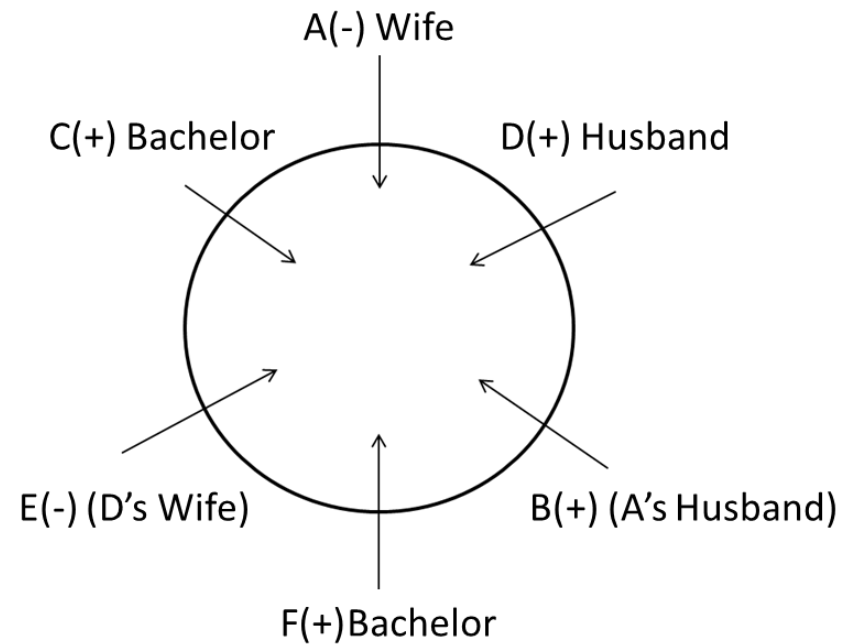
F(+)Bachelor

Q2. How many females are seated between the two husband, if we count clockwise from D?
a) 1
b) None
c) 2
d) CND
e) NOT

Answer: b

A(-) Wife

C(+) Bachelor

D(+) Husband

E(-) (D's Wife)

B(+) (A's Husband)

F(+)Bachelor

Q3. Moving clockwise, how many bachelors are there between A and her husband, if one starts from the husband?
a) Zero
b) 1
c) 2
d) CND
e) NOT

Answer: c
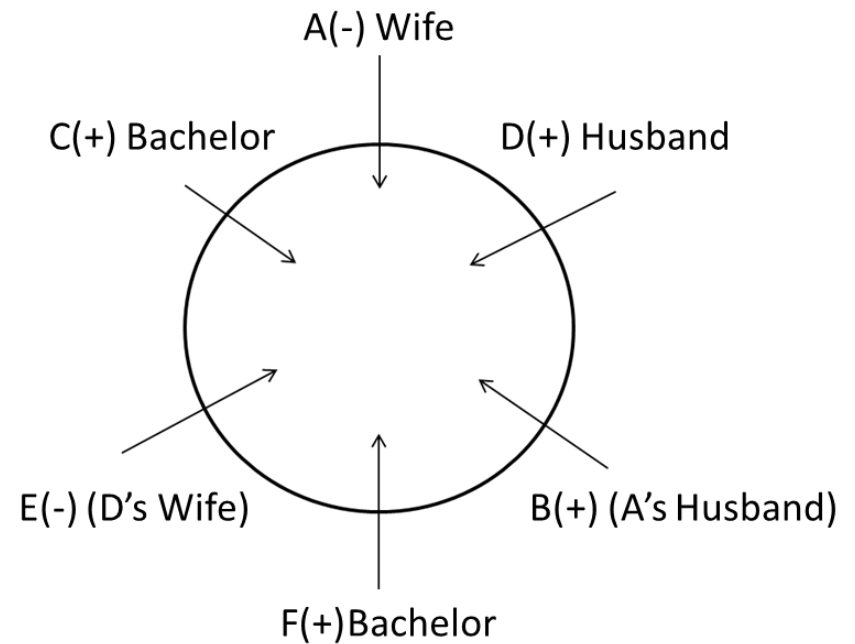
Q4. Which of the following depicts the correct couples?
a)   EC, AB
b)   EB,AD
c)   ED, AB
d)   ED, Can't say
e)   CND

Answer: c

Q5. If the two bachelors were to exchange their seats via the shorter route, how many females would they cross?
a) Zero
b) 1
c) 2
d) Can't say
e) NOT

Answer: b

A(-) Wife

C(+) Bachelor

D(+) Husband

E(-) (D's Wife)

B(+) (A's Husband)

F(+)Bachelor
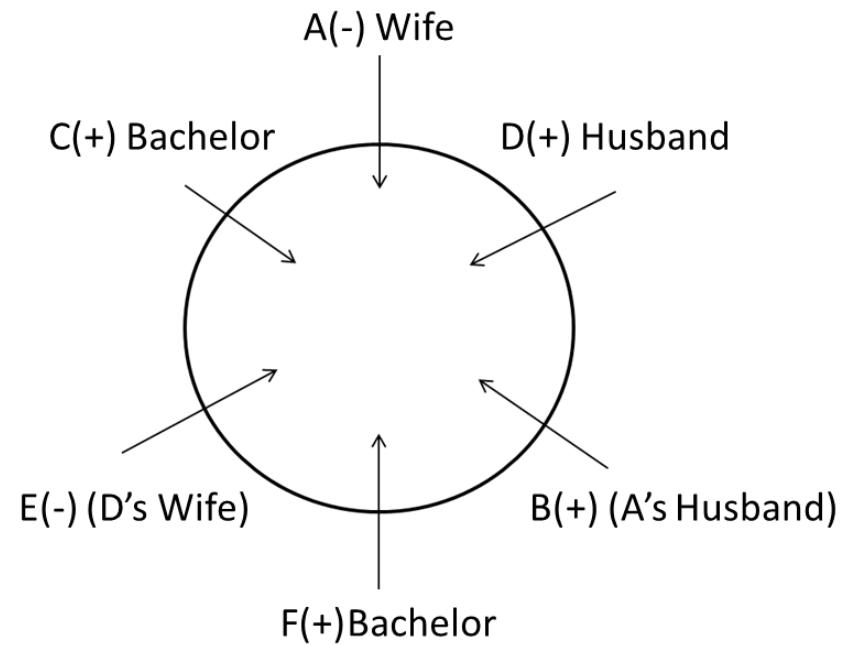
Directions (9-10): Study the information carefully and answer the questions given below

Six persons(A, B, C, D, E, F) sits around a triangular table such that three of them sit at the corners and the rest on the middle of the side. The one who sits at the corner face away from the center and the one who sit at the middle of the side face towards the center. They also like different animals i.e. fish, dog, rabbit, pigeon, duck and cat. The one who likes fish sits at the corner. The one who likes cat sits immediate right to the one who likes duck. C sits 2nd right to B, who likes rabbit. D faces the center and sits 3rd right to the one who likes pigeon. E sits immediate right to D. F sits at one of the corner but does not like pigeon and cat. E neither likes duck nor cat.

The one who likes fish sits at the corner. The one who likes cat sits immediate right to the one who likes duck. C sits 2nd right to B, who likes rabbit. D faces the center and sits 3rd right to the one who likes pigeon. E sits immediate right to D. F sits at one of the corner but does not like pigeon and cat. E neither likes duck nor cat.

Cat is immediate right to Duck   **C is 2nd right to B and B likes Rabbit**

Fish

D faces the center and sits 3rd right to the one who likes pigeon. E sits immediate right to D. F sits at one of the corner but does not like pigeon and cat. E neither likes duck nor cat.

Cat is immediate right to Duck

C is 2nd right to B and B likes Rabbit

OR

E sits immediate right to D. F sits at one of the corner but does not like pigeon and cat. E neither likes duck nor cat.

Cat is immediate right to Duck

C is 2nd right to B and B likes Rabbit

OR

F does not like pigeon and cat. E neither likes duck nor cat.

Cat is immediate right to Duck

C is 2ⁿᵈ right to B and B likes Rabbit

OR

A

Pigeon

C   B

Rabbit

Fish

F   E   D

E

B   D

Rabbit

Pigeon   Fish

A   F

C

F sits at one of the corner but does not like pigeon and cat. E neither likes duck nor cat.

Cat is immediate right to Duck

Q1. Who among the following likes duck?
(a) E
(b) F
(c) C
(d) B
(e) none of these
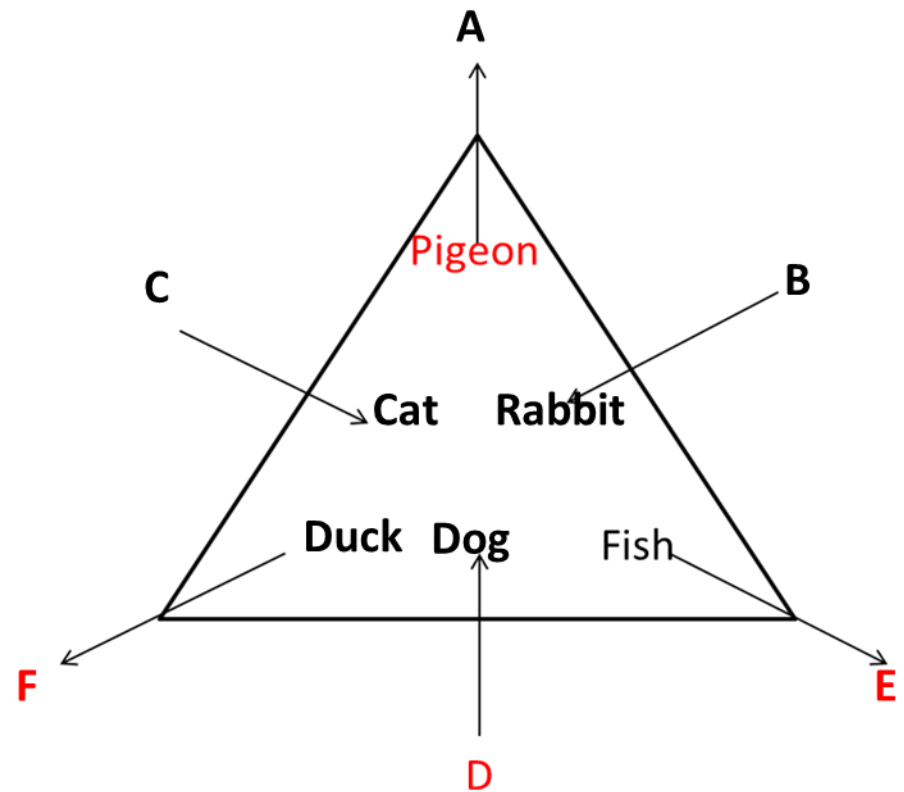
Answer: b

Q2. Who among the following sits 3rd to the right of the one who is 2nd left of A?
(a) E
(b) F
(c) C
(d) B
(e) none of these

Answer: d

Q3. Who among the following is sitting opposite to the one who likes fish?
(a) E
(b) F
(c) C
(d) B
(e) none of these

Answer: c

Q4. Who are sitting on the corners?
(a) CDE
(b) BCD
(c) EDF
(d) AFE
(e) none of these

Answer: d
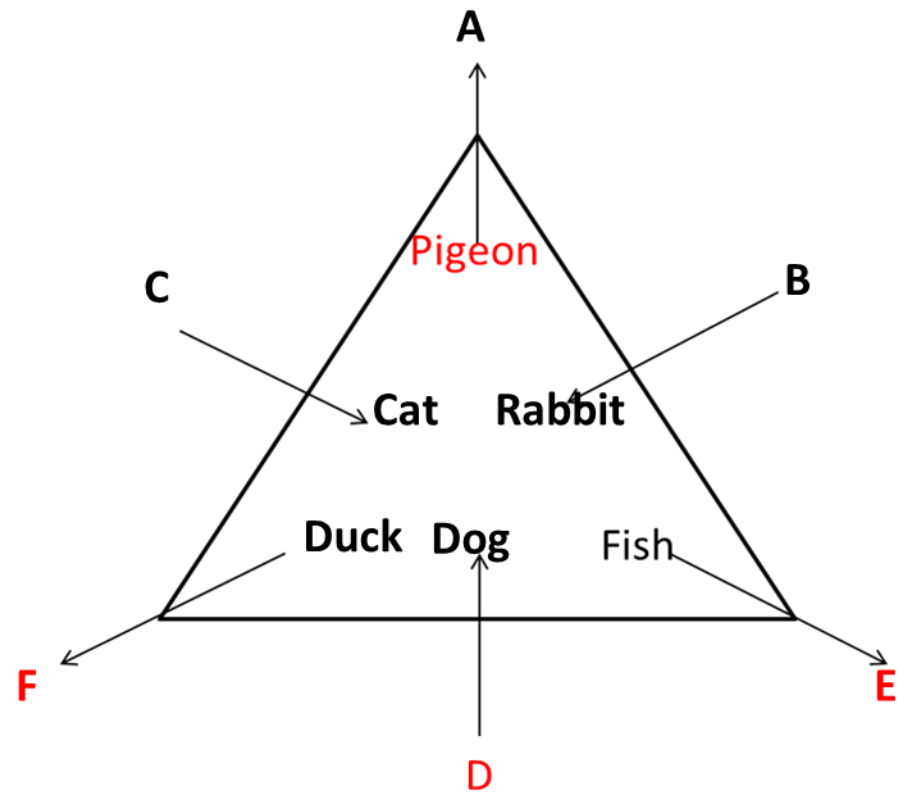
Q5. Which option is odd one out?
(a) F, Pigeon
(b) D, Rabbit
(c) B, Dog
(d) E, Duck
(e) A, Fish

Answer: c
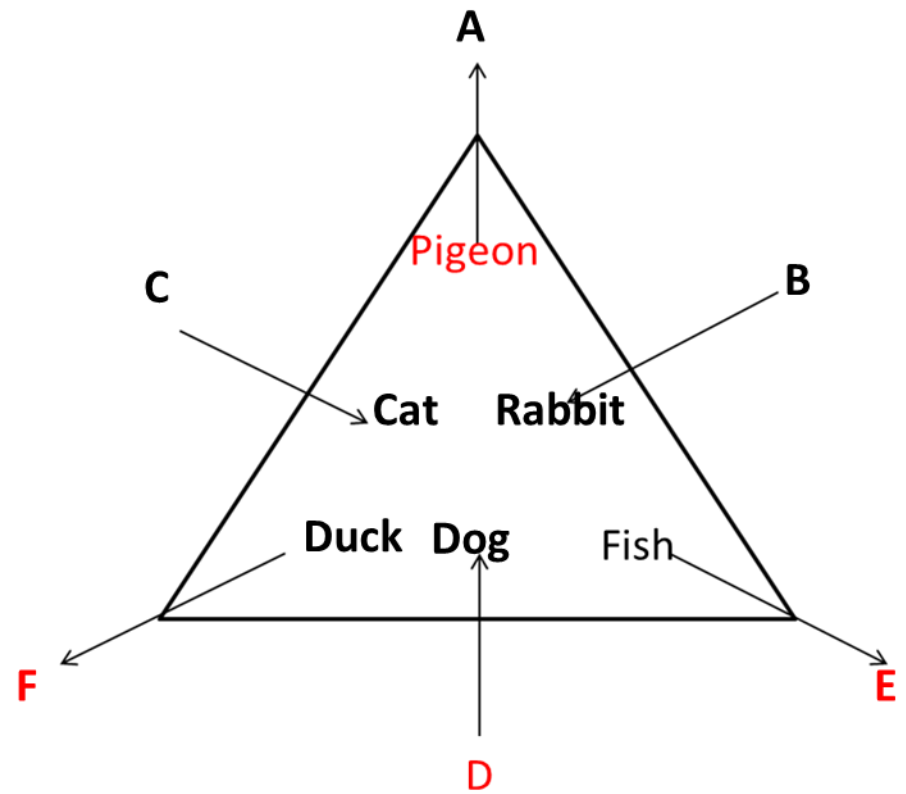
Example:-A,B,C,D,E,F,G and H are sitting around a square table facing the centre in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides.

i)A sits second to the right of F.F sits in the middle of one of the sides of the table.

ii)G who does not sit at any of the corners of the table sits second to the right of D.

iii)only two people sit between D and B.

iv)C is not an immediate neighbour of G.

v)H sits second to the left of B.

vi)E is not an immediate neighbour of G or F.

Example:-A,B,C,D,E,F,G and H are sitting around a square table facing the centre in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides.

i)A sits second to the right of F.F sits in the middle of one of the sides of the table.
ii)G who does not sit at any of the corners of the table sits second to the right of D.
iii)only two people sit between D and B.
iv)C is not an immediate neighbour of G.
v)H sits second to the left of B.
vi)E is not an immediate neighbour of G or F.

ii)G who does not sit at any of the corners of the table sits second to the right of D.
iii)only two people sit between D and B.
iv)C is not an immediate neighbour of G.
v)H sits second to the left of B.
vi)E is not an immediate neighbour of G or F.

F

A

×G

F

A   G

D
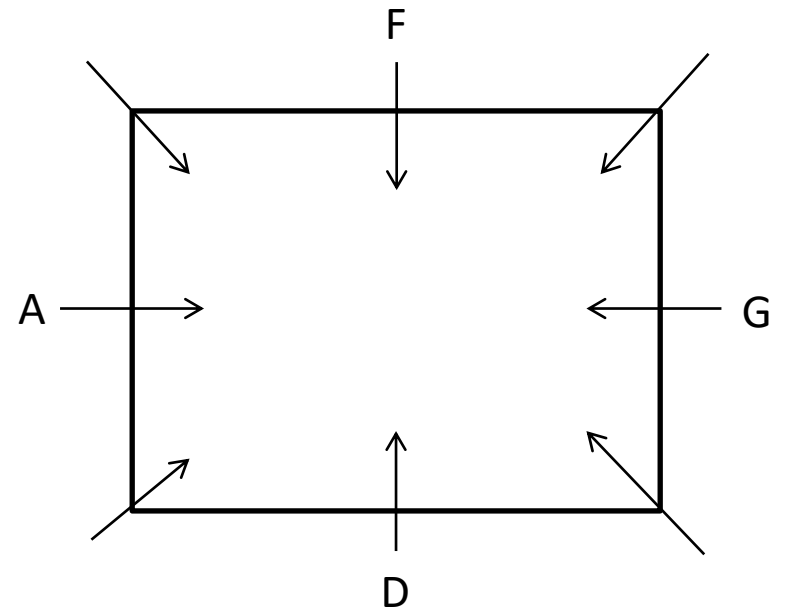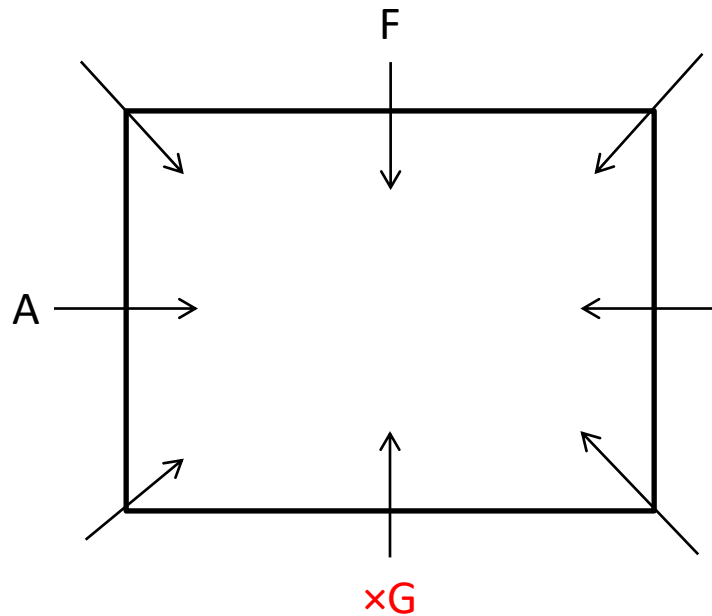
iii)only two people sit between D and B.
iv)C is not an immediate neighbour of G.
 v)H sits second to the left of B.
vi)E is not an immediate neighbour of G or F.
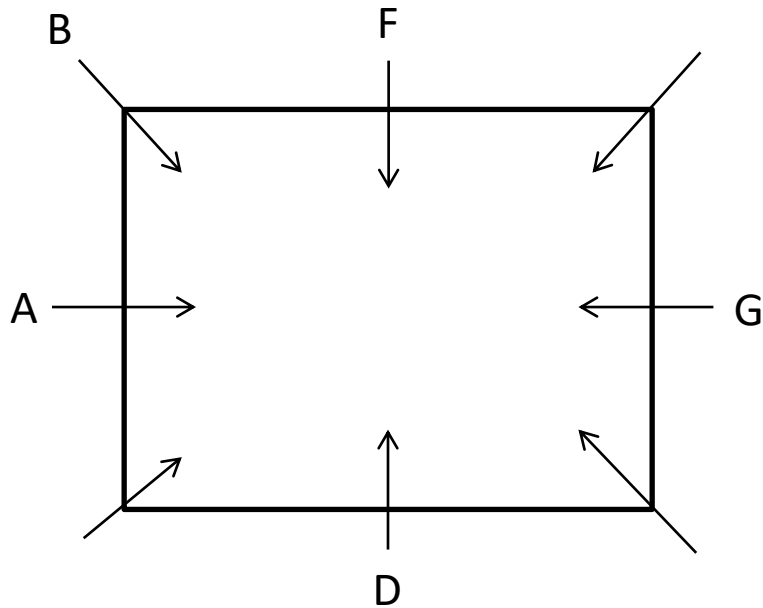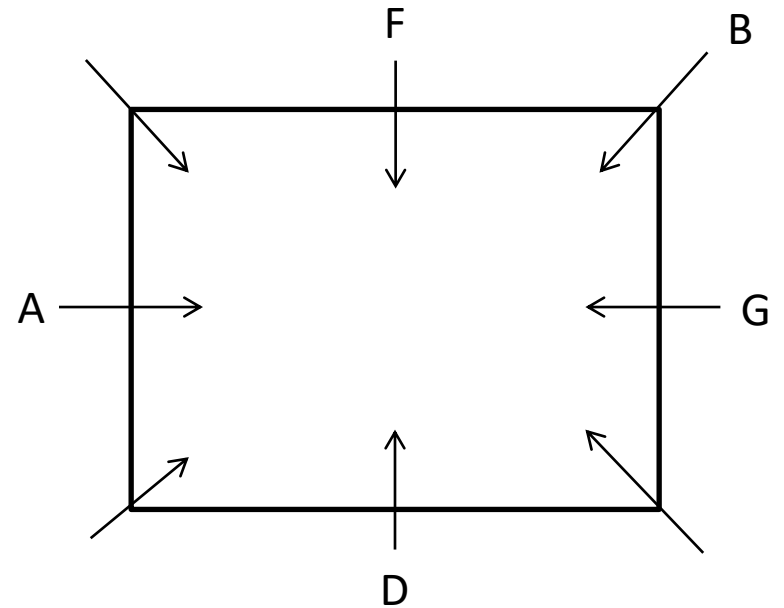
iv)C is not an immediate neighbour of G.

v)H sits second to the left of B.

vi)E is not an immediate neighbour of G or F.
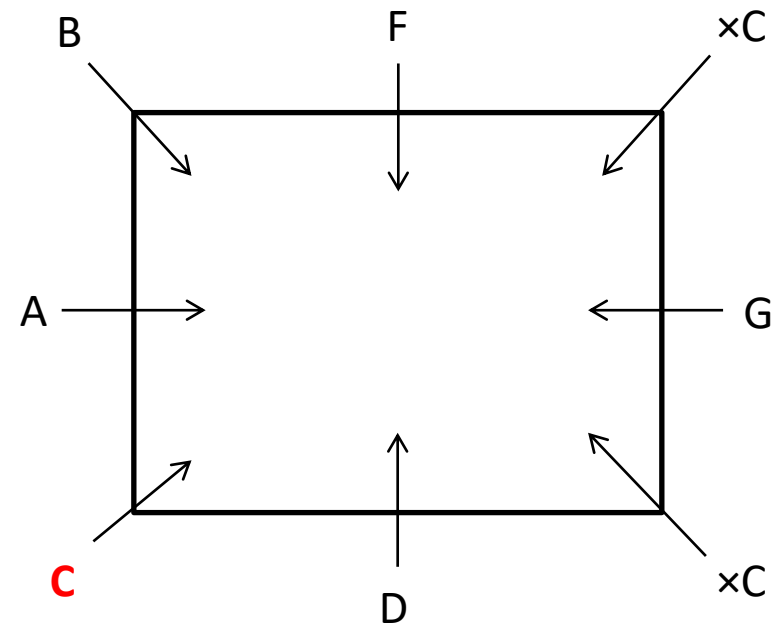
OR
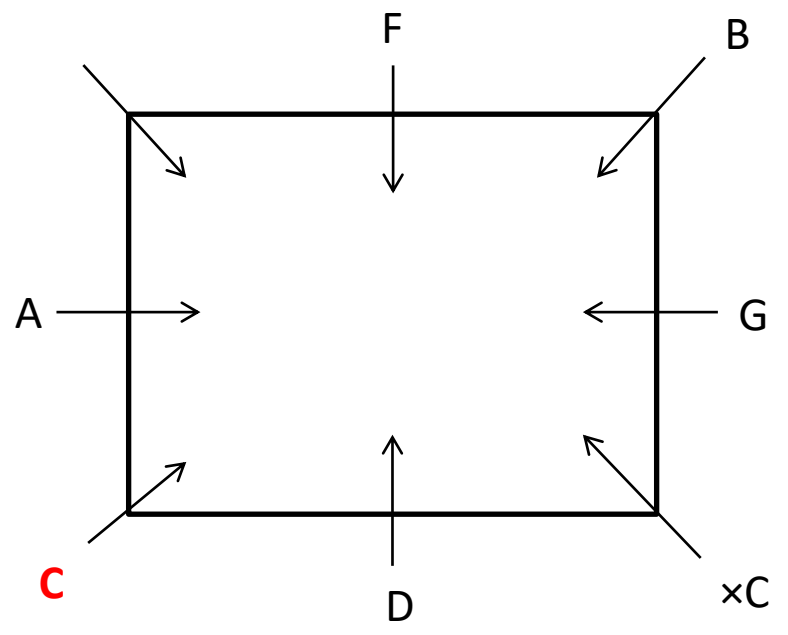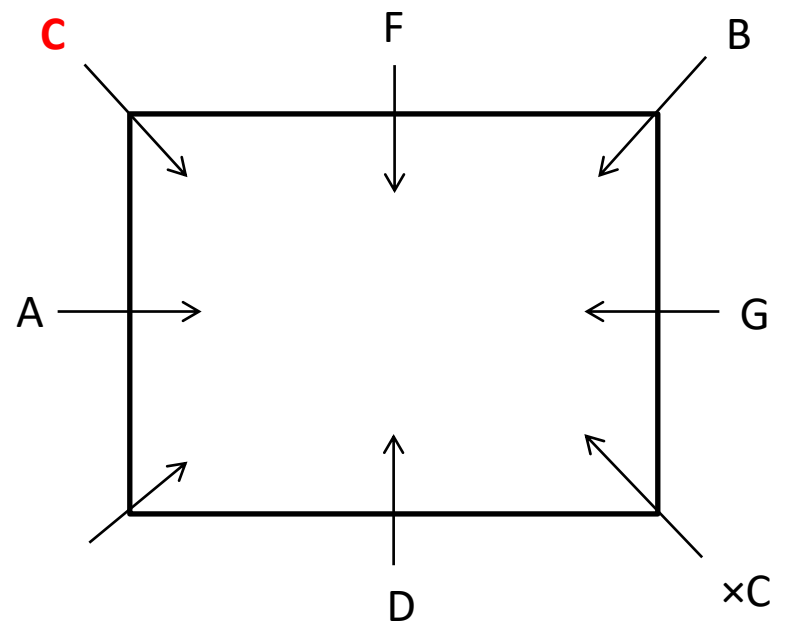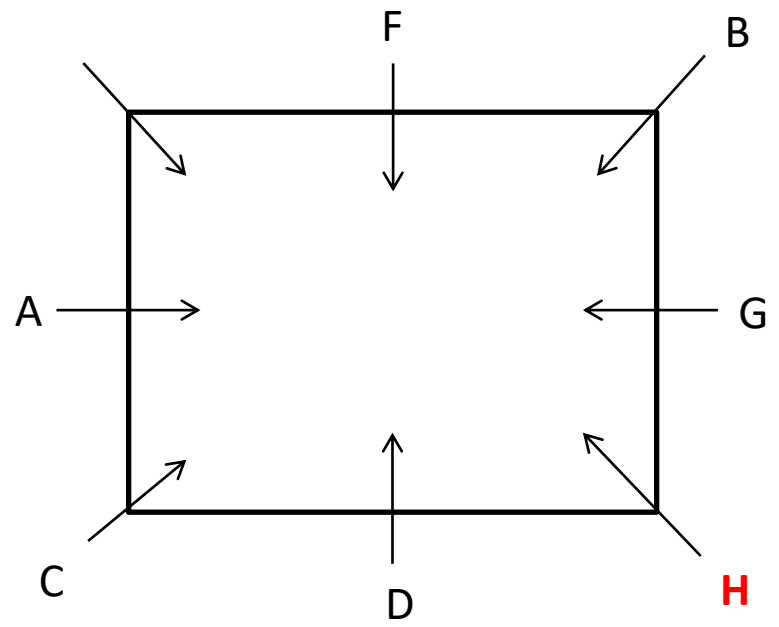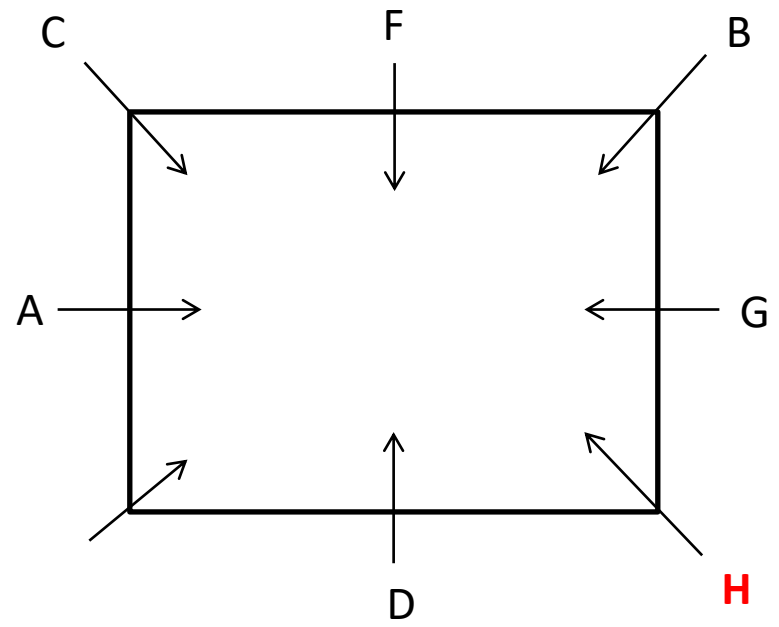
v)H sits second to the left of B.
vi)E is not an immediate neighbour of G or F.

OR

vi)E is not an immediate neighbour of G or F.
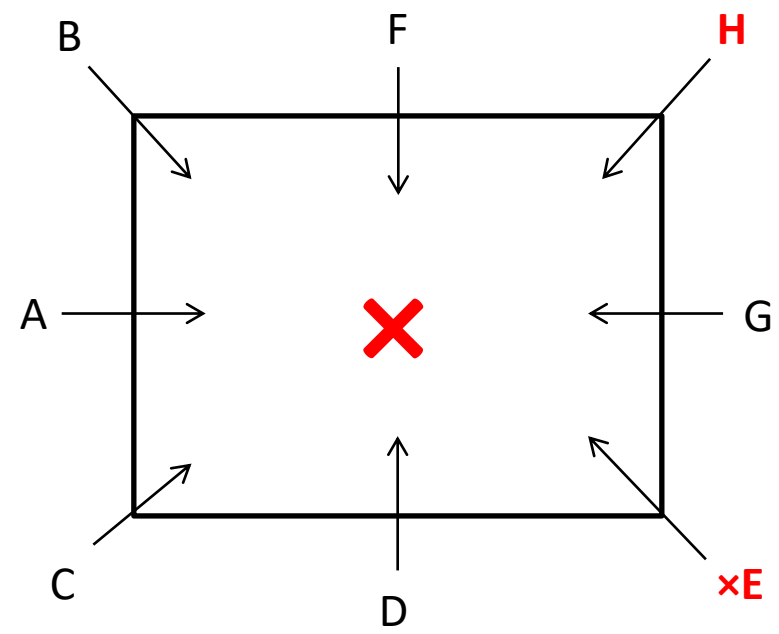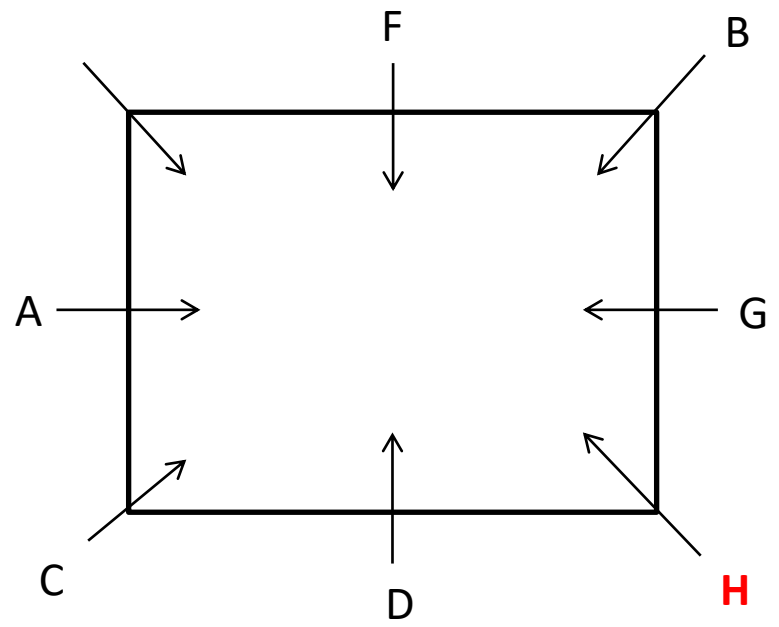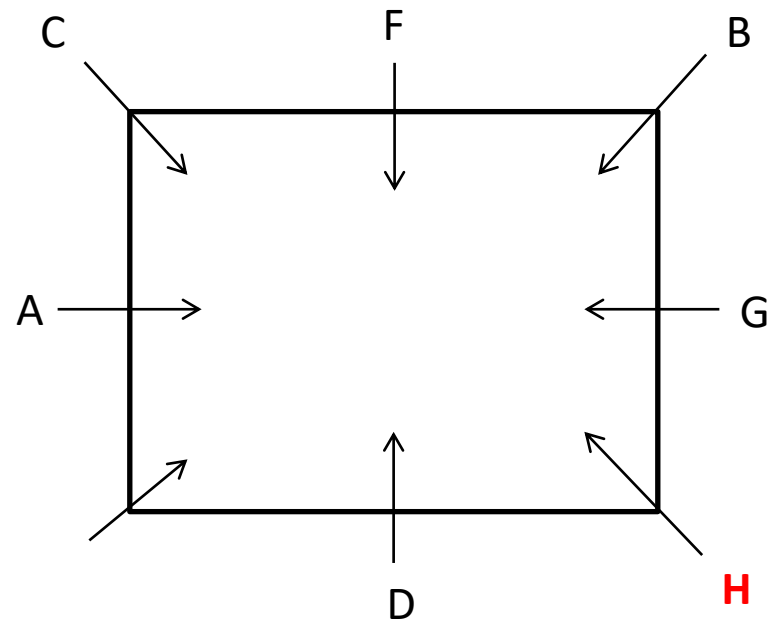
vi)E is not an immediate neighbour of G or F.
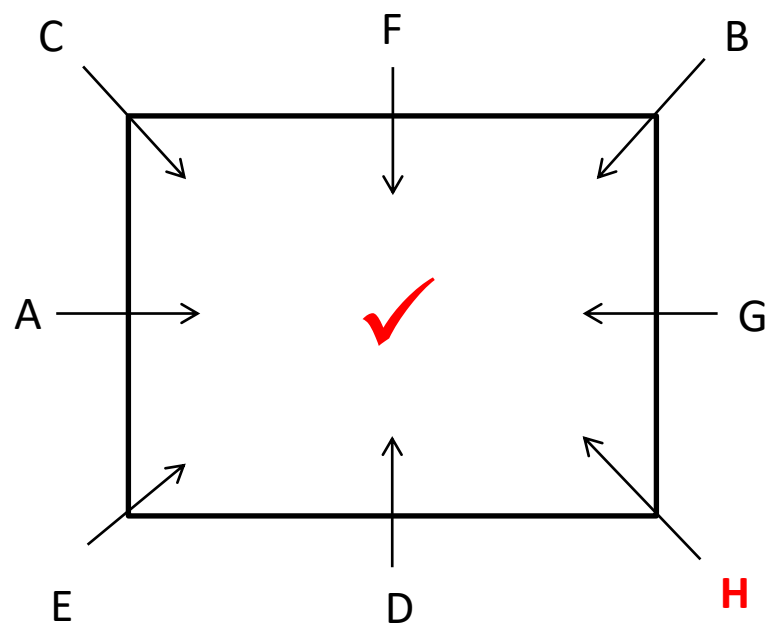
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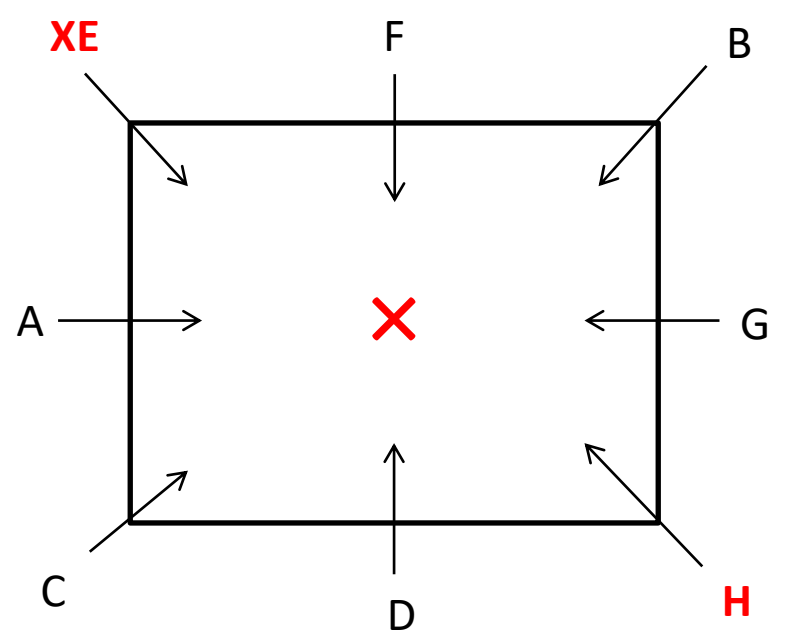
Q1.Who sits exactly between F and A?
a)B
b)C
c)E
d)H
e)none of these

Answer:-b

Q2.How many persons sit between A and H when counted in anti-clockwise direction from A?
a)none
b)one
c)two
d)three
e)four

Answer:-c
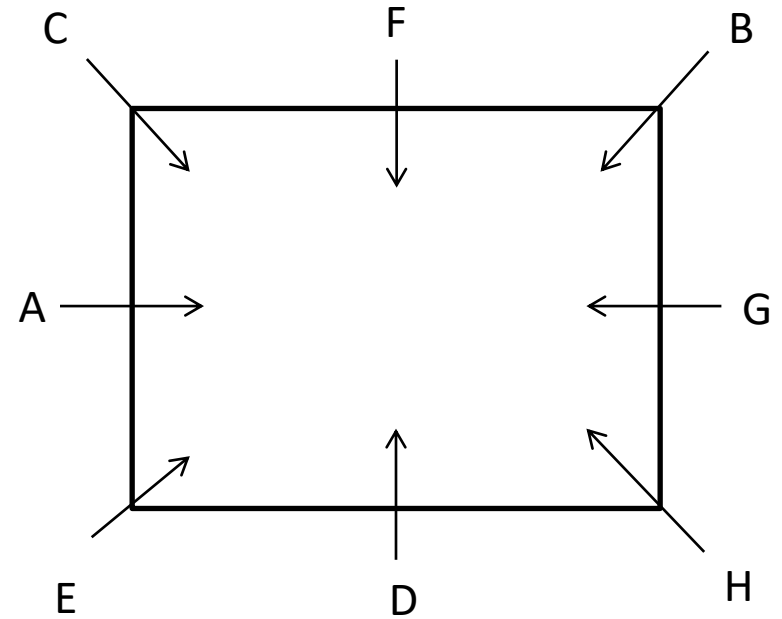
Q3. Four of the following five are alike in a certain way based on their sitting positions in the above arrangement and so form a group. Which is the one that does not belong to that group?

a)D

b)F

c)A

d)E

e)G

C   F   B

A   →   ←   G

E   D   H
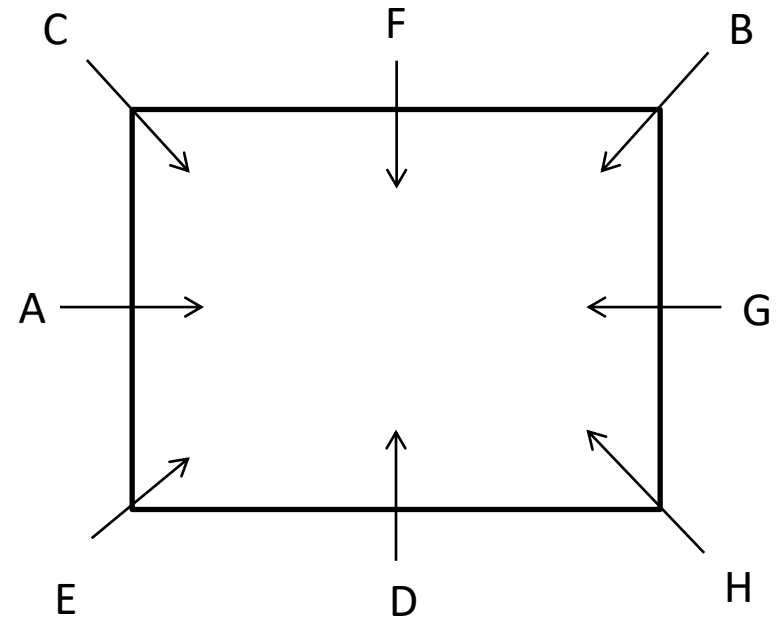
Answer:-d

Q4. What is the position of F with respect to C?

a) Third to the left   b) immediate to the right

c) second to the left   d) third to the right

e) immediate to the left

Answer:-e

Example:-Study the following information carefully and answer the questions given below: - Eight persons A, B, C, D, E, F, G and H are sitting around a rectangular table in such a way that four persons sit on each of the four corner of the table and other four persons sit on the middle of each side. The one who sits at the corner of table faces outside the center of table and the one who sits at the middle side of table faces towards the center of table. Persons sitting on opposite sides are exactly opposite to each other.

F sits at one of the middle side of the table. Two persons sit between F and E. Only one person sits between F and C. E does not sit near to C. Either A sits 2nd to the left of H or 2nd right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.
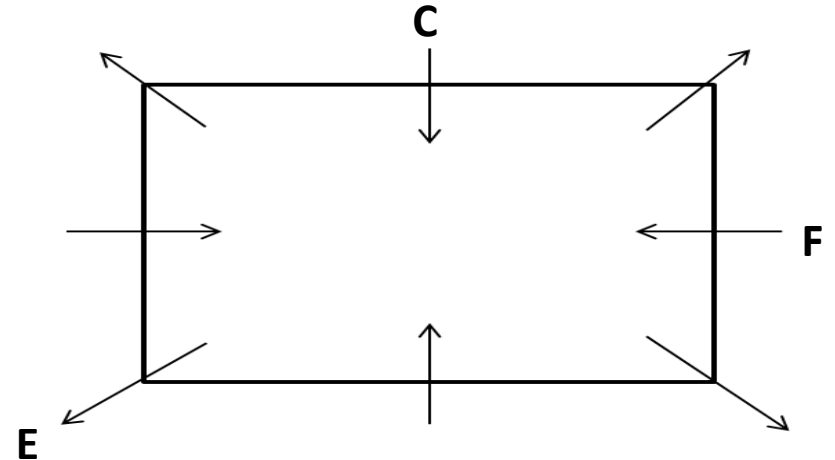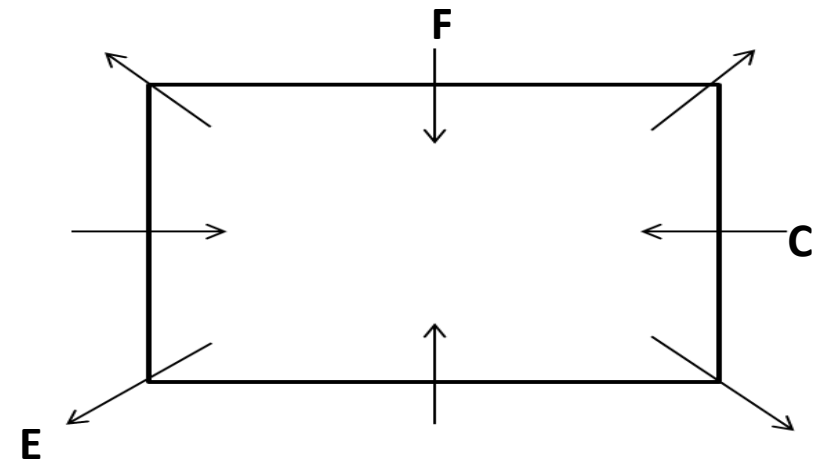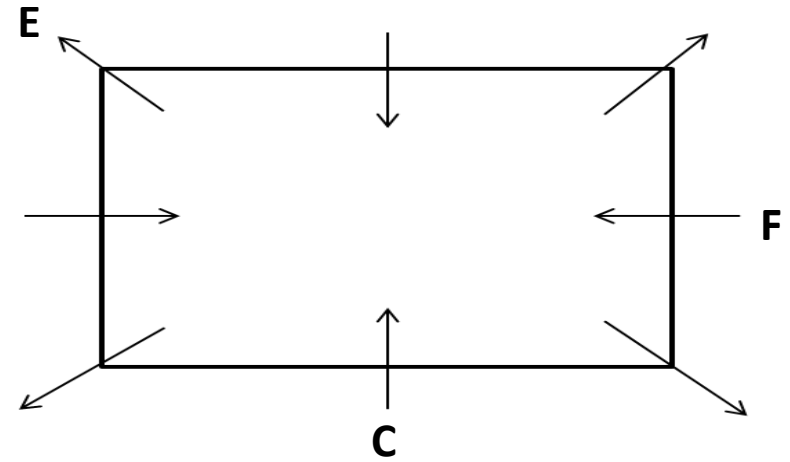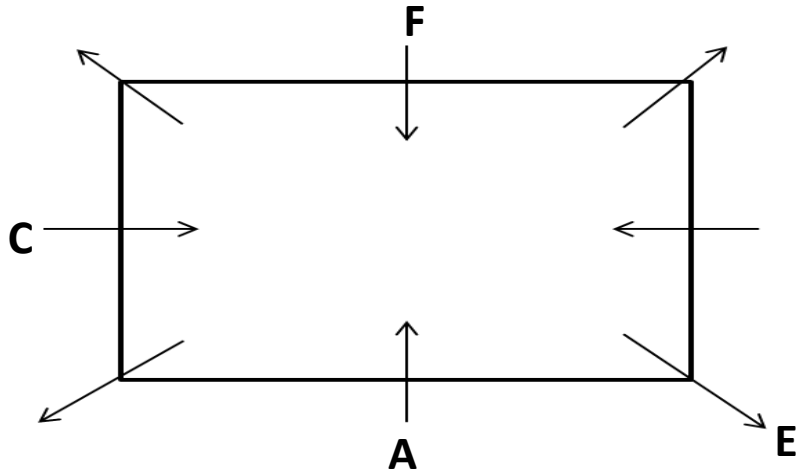
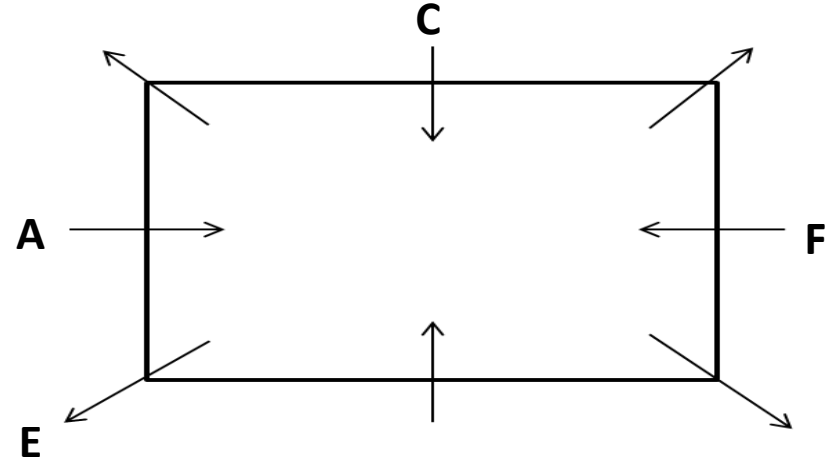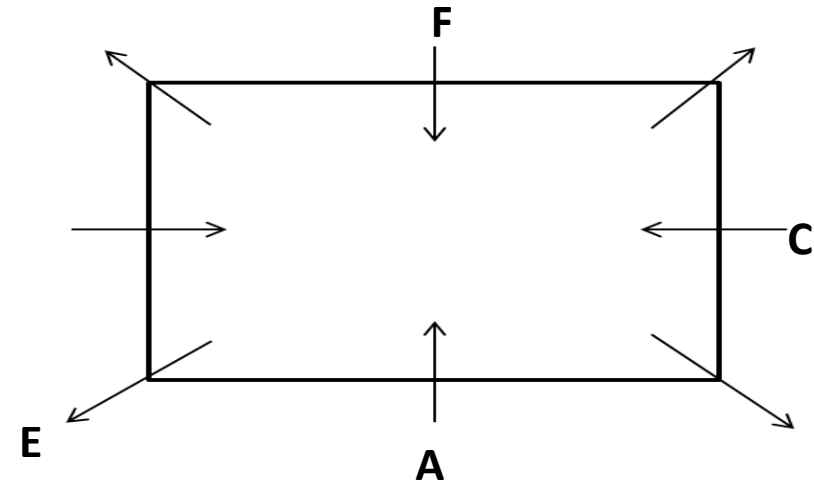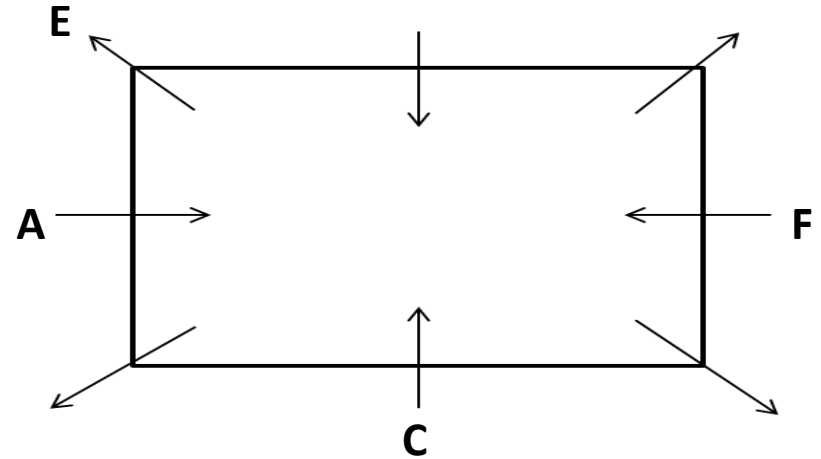**F sits at one of the middle side of the table.** Two persons sit between F and E. Only one person sits between F and C. E does not sit near to C. Either A sits 2nd to the left of H or 2nd right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.

F

OR

F

Two persons sit between F and E. Only one person sits between F and C. E does not sit near to C. Either A sits 2nd to the left of H or 2nd right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.


OR

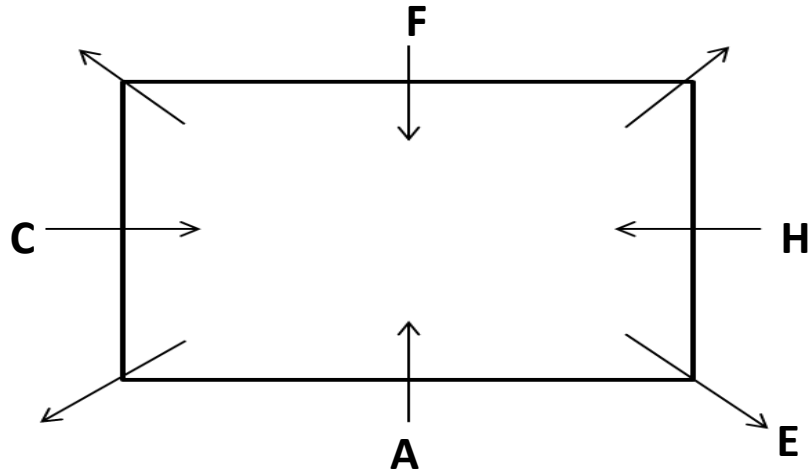**Only one person sits between F and C.** E does not sit near to C. Either A sits 2nd to the left of H or 2nd right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.
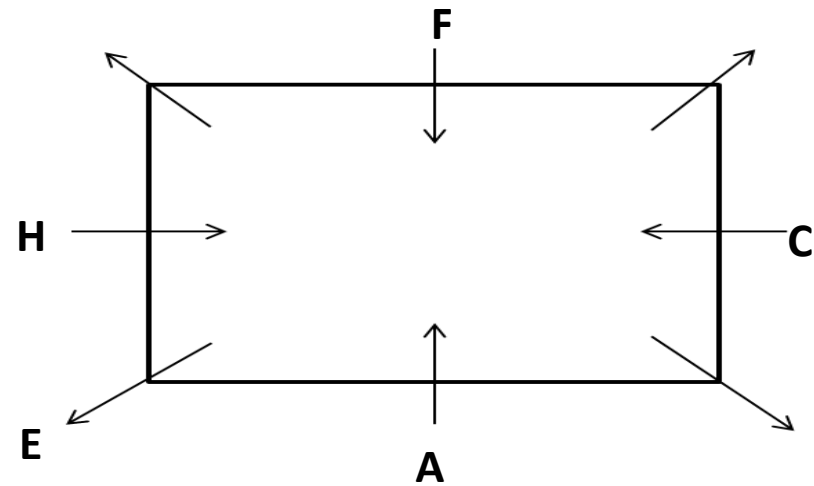

OR

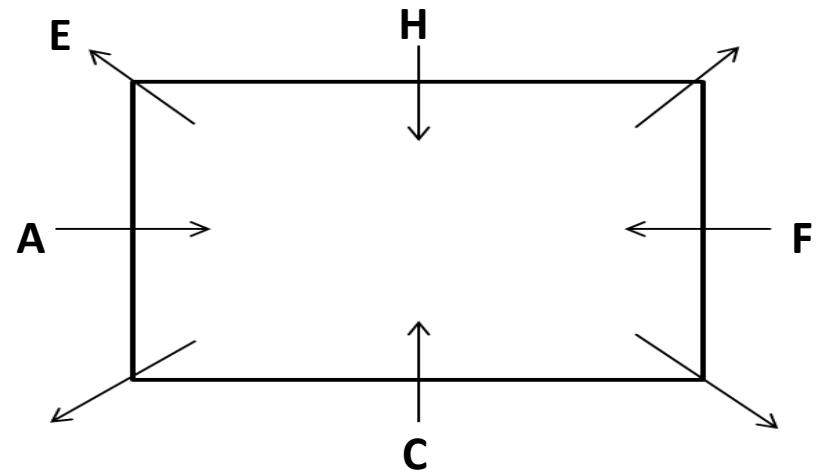**Only one person sits between F and C. E does not sit near to C.** Either A sits 2nd to the left of H or 2nd right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.
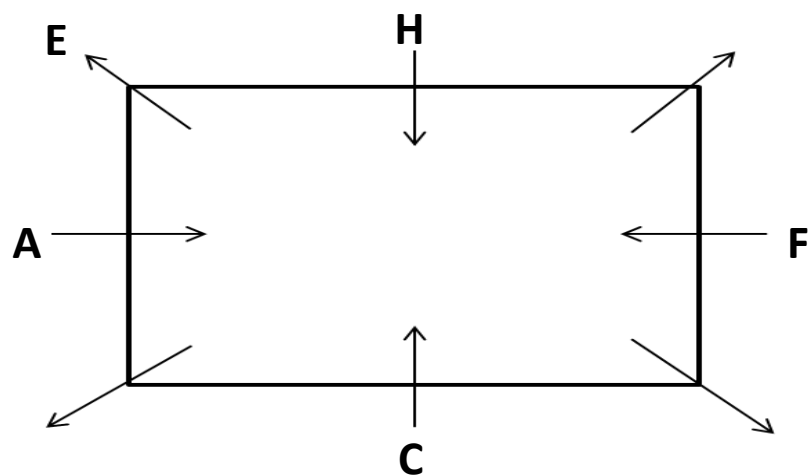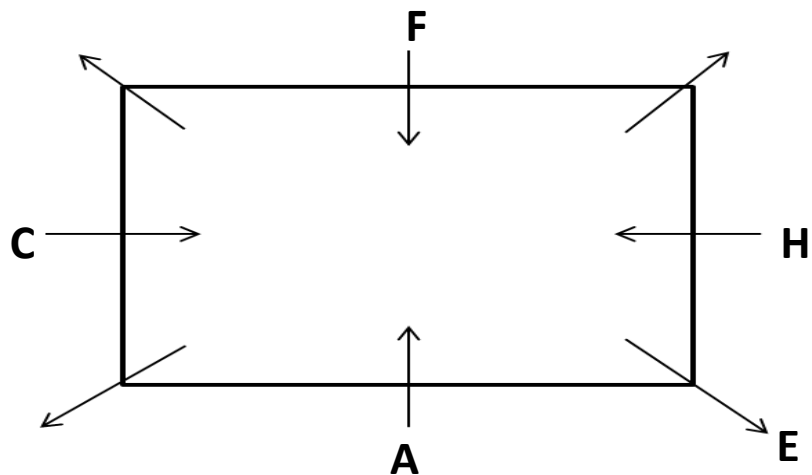

OR

Either A sits 2ⁿᵈ to the left of H or 2ⁿᵈ to the right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.
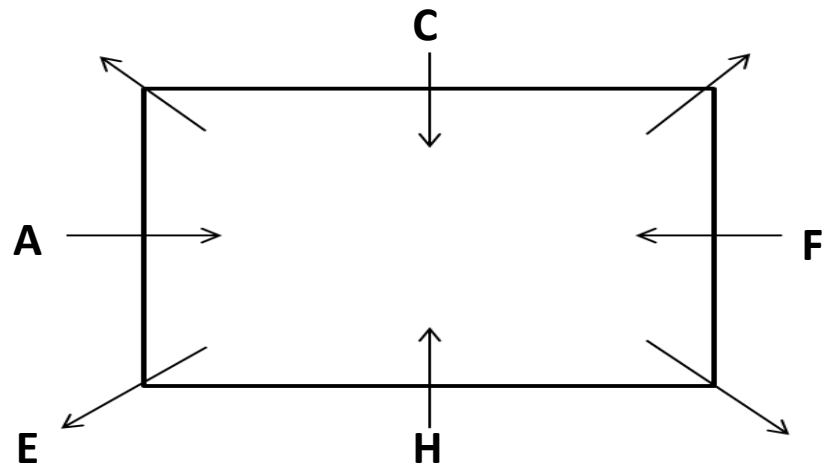

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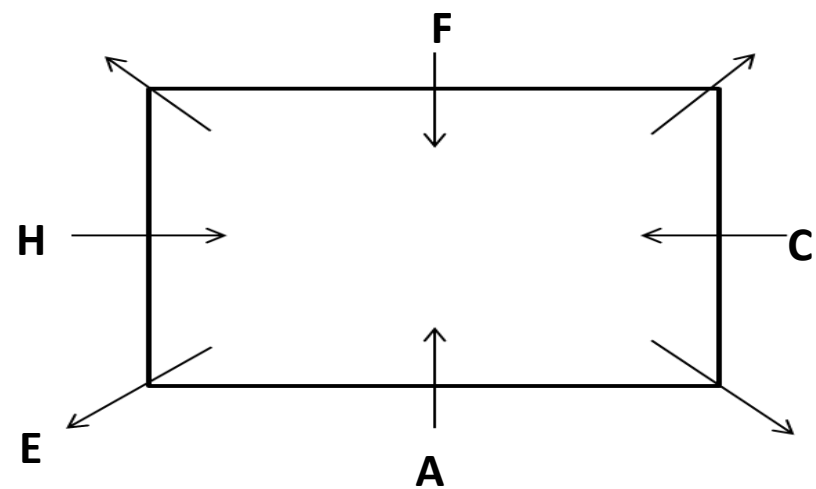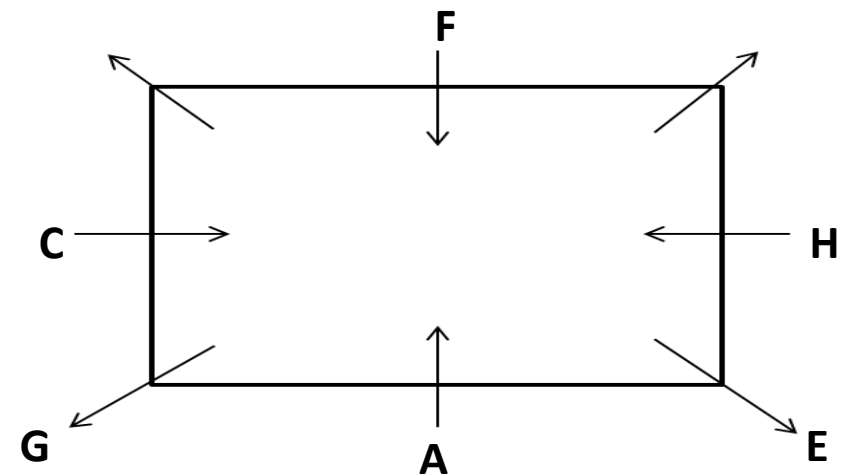Either A sits 2nd to the left of H or 2nd to the right of H. **One person sits between A and C.** B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.

OR

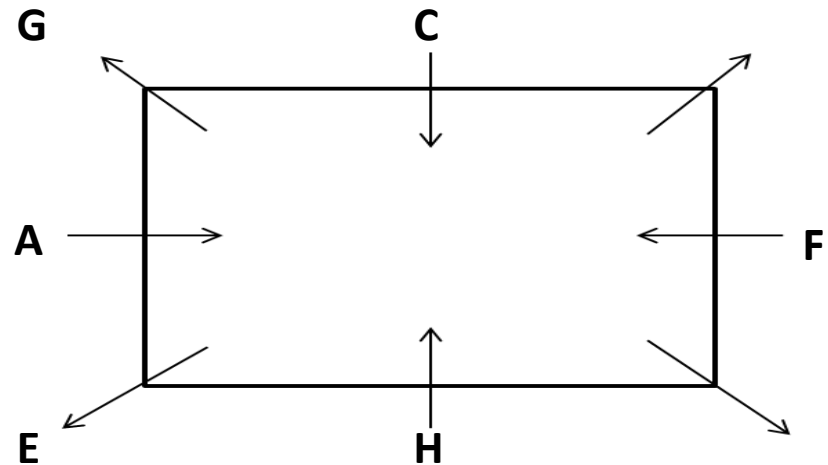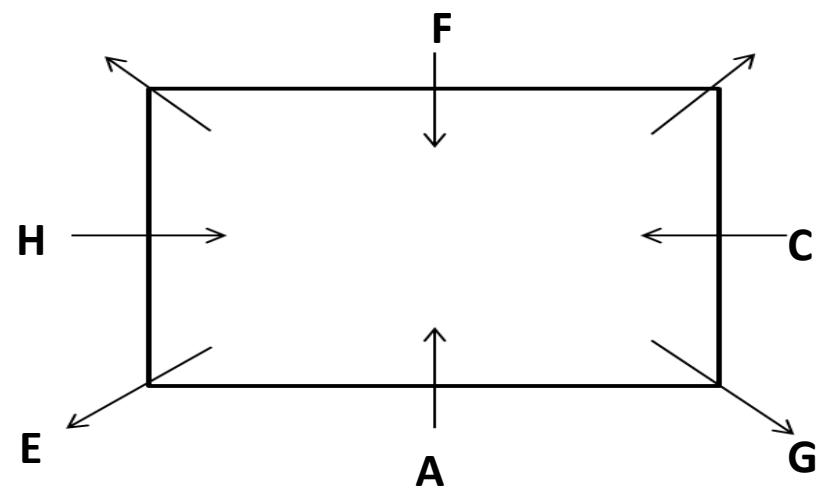**Either A sits 2nd to the left of H or 2nd to the right of H.** B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.
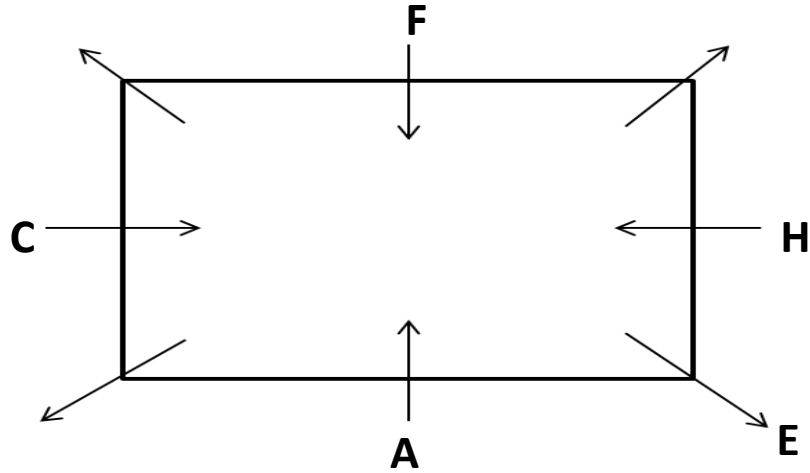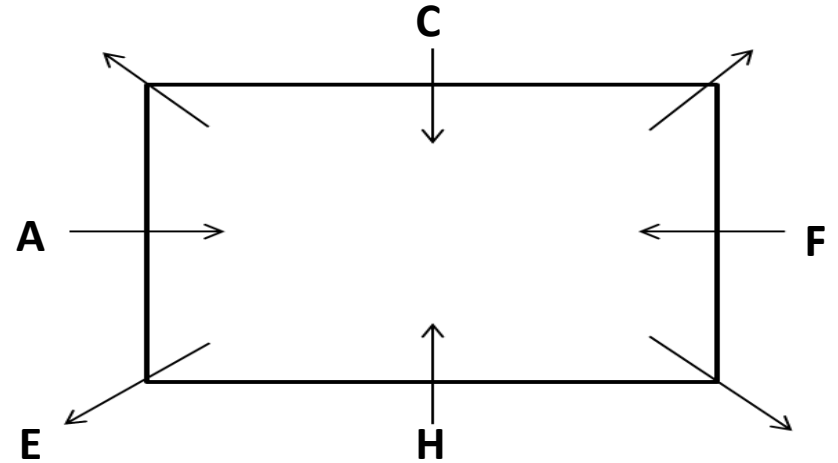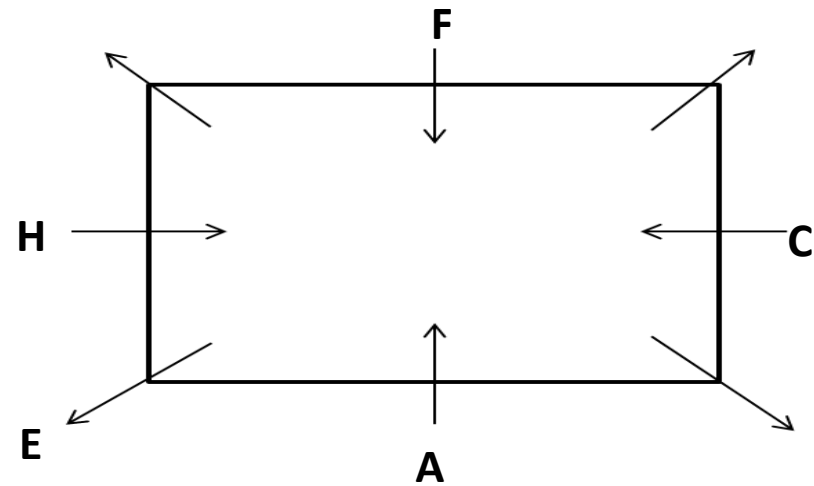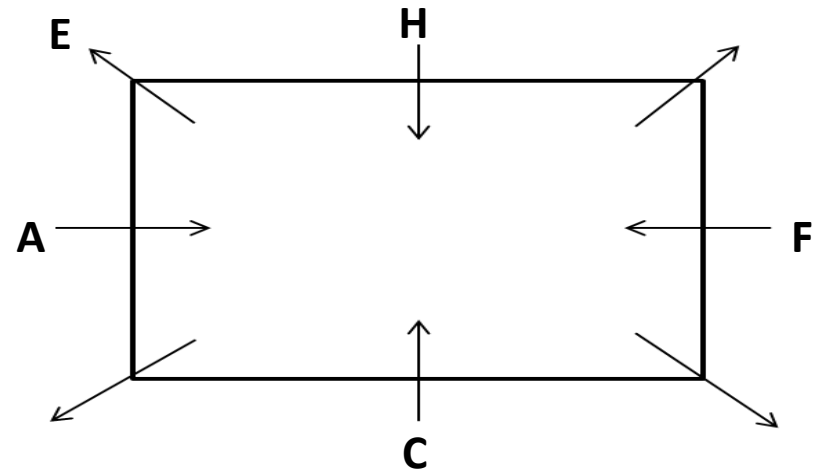
OR

B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.

OR

B and G sit opposite to each other. **D sits 2nd to the left of B.** G doesn't sit next to F.
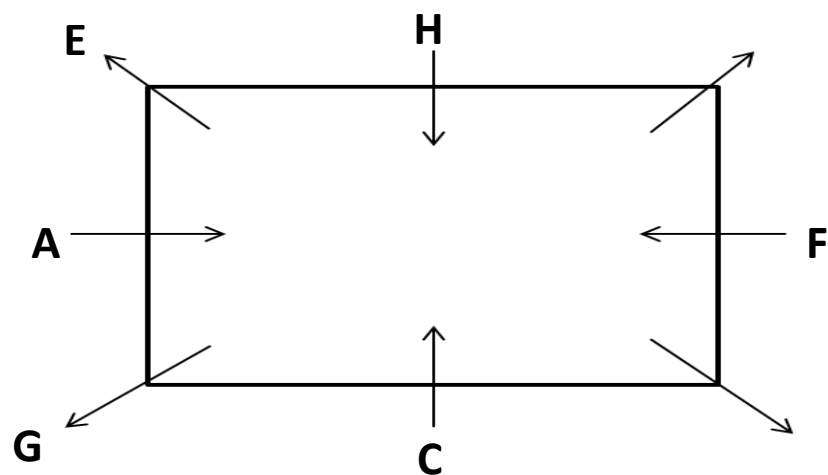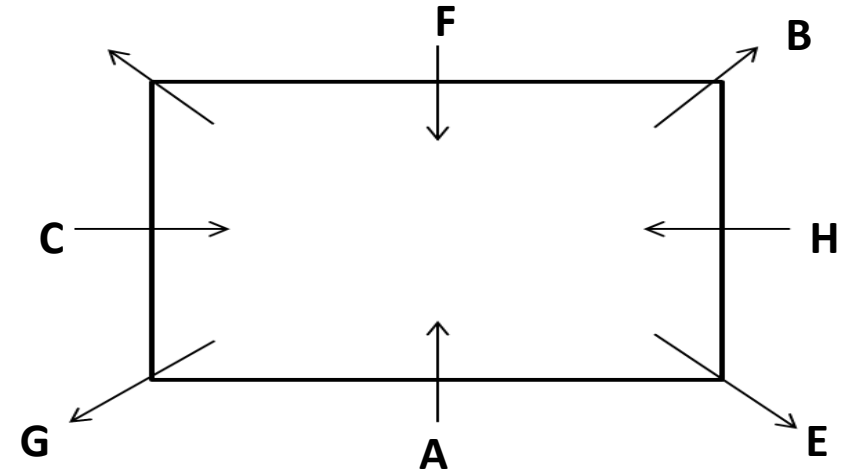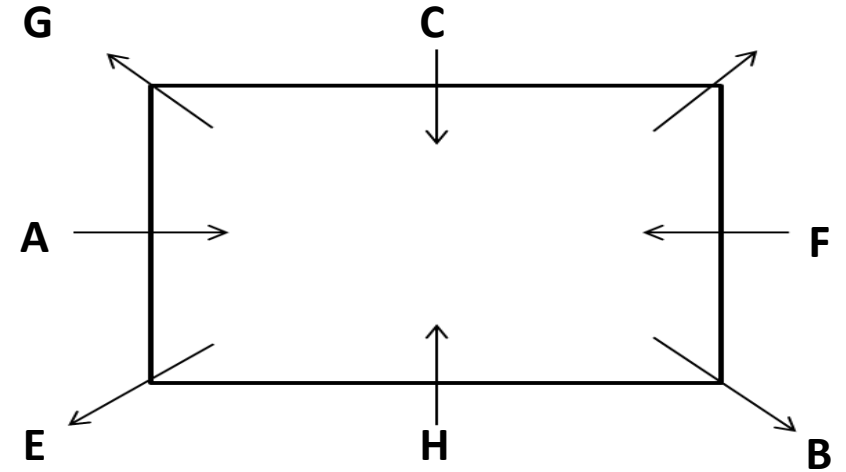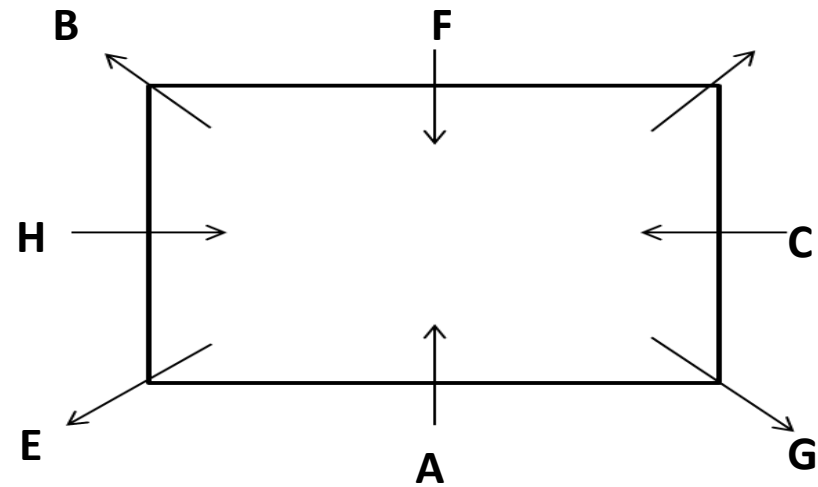

OR

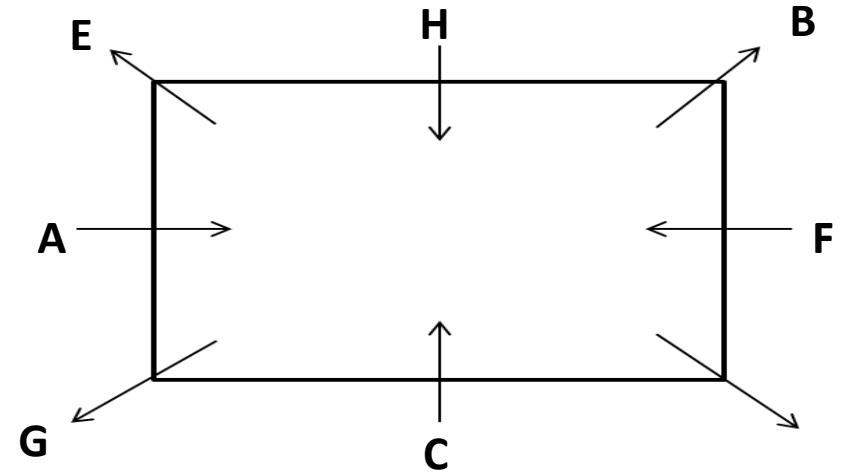B and G sit opposite to each other. D sits 2nd to the left of B. **G doesn't sit next to F.**

Top-left arrangement: F (top), C (left), H (right), G, A, E (bottom)

OR

Top-right arrangement: E, H (top), A (left), F (right), G, C (bottom)

Bottom-left arrangement: F (top), H (left), C (right), E, A, G (bottom)

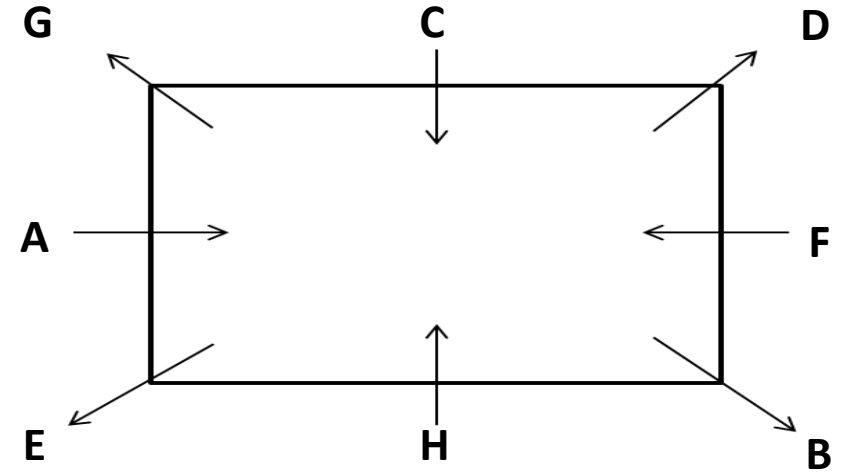Bottom-right arrangement: G, C (top), A (left), F (right), E, H (bottom)
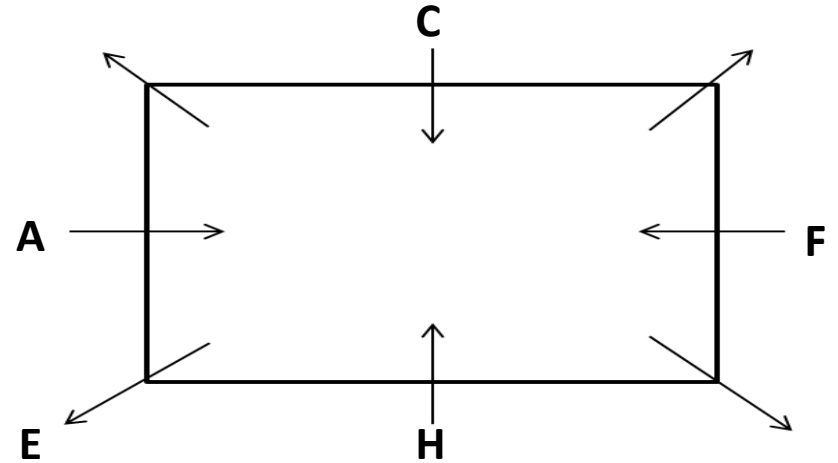
B and G sit opposite to each other. D sits 2nd to the left of B.
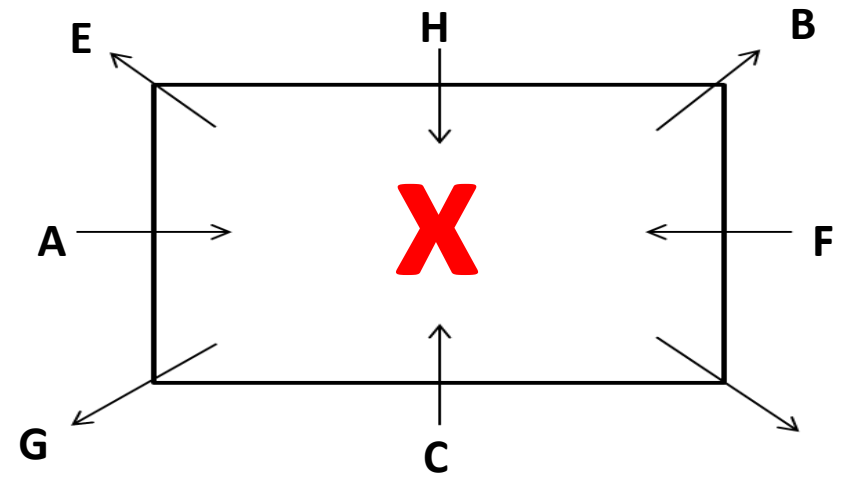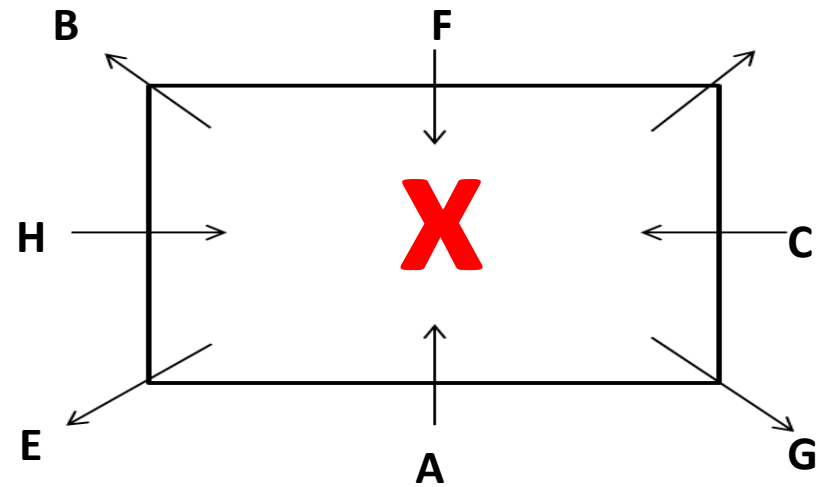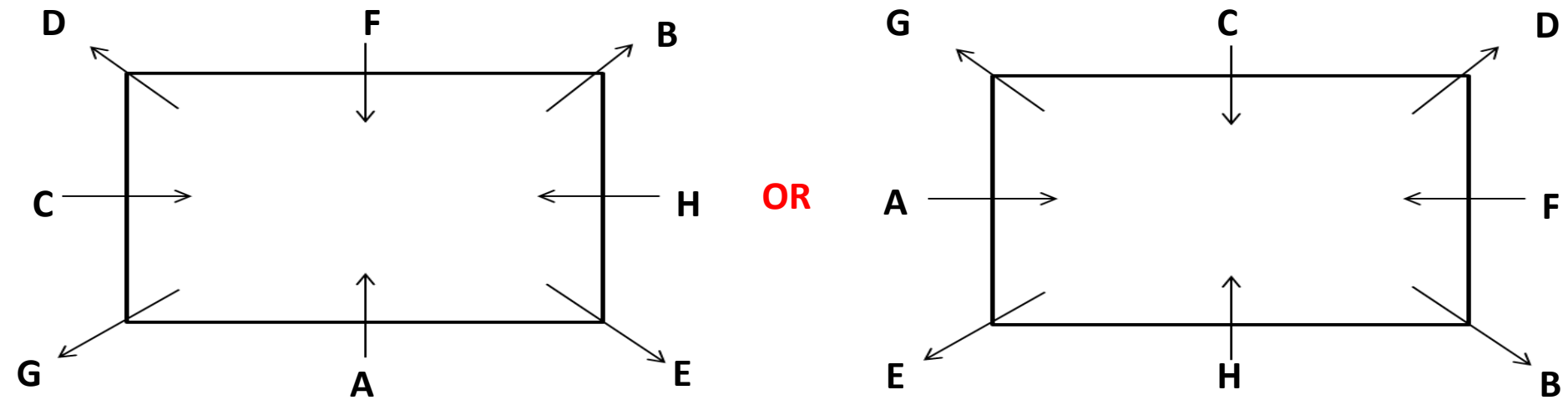

OR

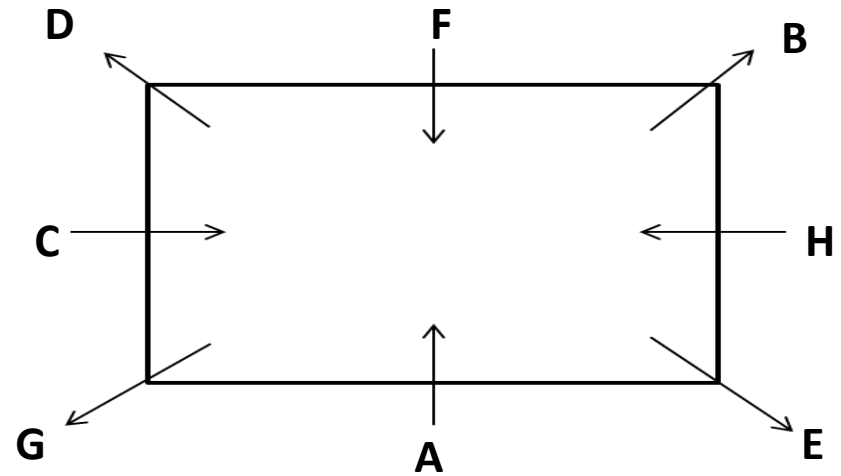**D sits 2nd to the left of B.**
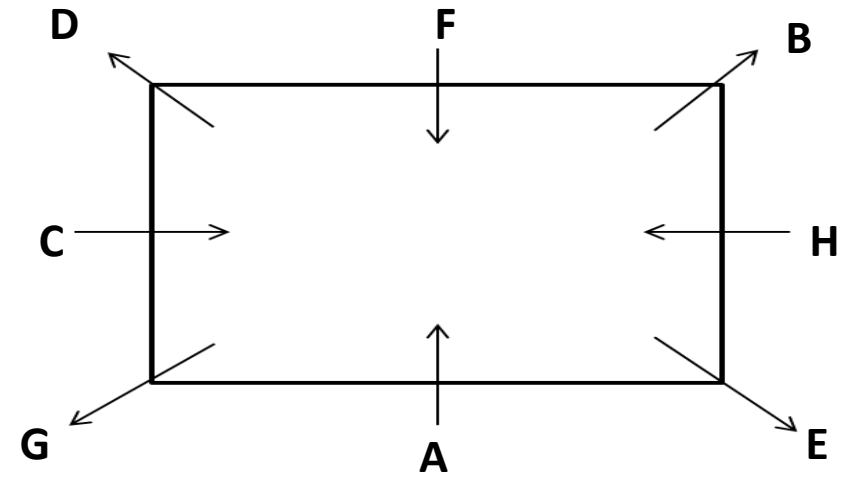
OR

Why two diagrams???

So in the starting of the solution only take one possibility.

Q1. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?

(a) E   (b) G   (c) D   (d) H   (e) B

Answer: d

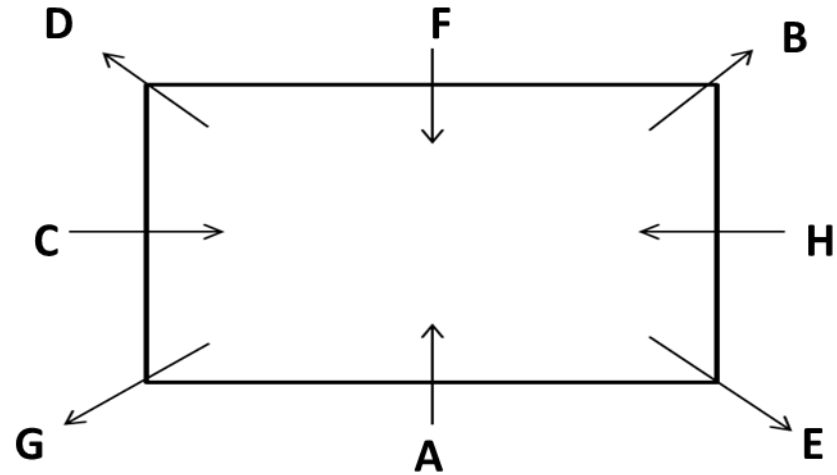Q2. Who among the following sits 3rd to the right of D?

(a) E   (b) H   (c) C   (d) A   (e) G

Answer: b

Q3. What is the position of F with respect to G?
(a) 3rd to the right
(b) 2nd to the right
(c) 2nd to the left
(d) 3rd to the left
(e) None of these

Answer: a

Q4. How many persons sit between D and F when counted to the right of D?
(a) One   (b) None   (c) Two   (d) Three   (e) Four

Answer: b

Q5. Who among the following faces to C?
(a) H   (b) B   (c) G   (d) E
(e) None of these

Answer: a

All The Best